

MARINER EDUCATION AND WORKFORCE

(110-79)

HEARING

BEFORE THE

SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION
OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

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U.S. House of Representatives
Committee on Transportation and Infrastructure
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October 15, 2007

James W. Cook II, Republican Chief of Staff

SUMMARY OF SUBJECT MATTER

TO: Members of the Committee on Transportation and Infrastructure
FROM: Subcommittee on Coast Guard and Maritime Transportation
SUBJECT: Hearing on Mariner Education and Workforce

PURPOSE OF HEARING

The Subcommittee on Coast Guard and Maritime Transportation will meet on Wednesday, October 17, at 10:00 a.m., to receive testimony on trends and innovations in mariner education and to assess how growing workforce shortages will affect the maritime industry as trade continues to increase. Specifically, the hearing will consider the possible impact of various factors on workforce shortage, including wage levels; lifestyle challenges associated with employment in the maritime industry; and training requirements imposed by the Standards of Training, Certification, and Watchkeeping ("STCW") Convention.

BACKGROUND

The U.S. maritime transportation industry serves the needs of both domestic and foreign commerce. It is comprised of companies that carry passengers or freight on the inland waterways or open seas and operate canals, terminals, charter vessels, and towing services.

According to the U.S. Department of Commerce, the movement of goods in the U.S. maritime sector accounts for some \$750 billion of the U.S. Gross Domestic Product – in large part because our ports are the gateways through which 80 percent of our nation's foreign trade by volume enters the country.

U.S. waterborne trade, which grew by 8.5 percent between 2001 and 2005, totaled 2.3 billion metric tons in 2005. Foreign commerce totaled more than 1.3 billion metric tons, accounting for 59 percent of the total amount of waterborne commerce in the United States.

Among all foreign commerce entering the U.S., the trade in containers has experienced a staggering 52 percent increase over the past five years. However, growth in the container trade has been tightly concentrated, with the top ten U.S. ports accounting for more than 90 percent of the total U.S. international container trade in 2006.¹

On average, the total value of goods (both imports and exports) passing through U.S. ports on a daily basis totals \$1.3 billion – and each of the 50 States relies on commerce flowing through 13 to 15 ports. It is estimated that by 2020, the nation's cargo volumes will double and passenger counts on cruise ships are also expected to double.

Unfortunately, while waterborne commerce in the United States continues to expand, the U.S. faces a growing labor shortage in the maritime industry, which threatens to leave the U.S. without the labor we need to meet the demands that continued growth in the maritime industry is expected to create.

There are currently estimated to be more than 160,000 water transportation and port service workers in the U.S. Since 2001, approximately 15,500 jobs have been added to these industries.

At the end of 2006, 40,000 vessels privately owned by U.S. entities – but not necessarily registered in the U.S. – were in operation. The vast majority of these vessels (approximately 38,800) were vessels intended for use on inland U.S. waterways and along the U.S. coasts; 680 of the vessels were ocean-going (tankers, dry bulk, container ships etc.), while 629 vessels were offshore supply vessels that brought goods to offshore oil exploration platforms. The number of offshore supply vessels grew over 35 percent, from 465 in 2001 to 629 in 2006. Double hull tankers increased 54 percent from 131 in 2001 to 202 in 2006 and double hull tank barges increased 25 percent, from 2,717 in 2001 to 3,403 in 2006.

One area of significant growth in the maritime industry involves the transportation of liquefied natural gas (“LNG”). Over the last five years, the number of LNG carriers calling on U.S. ports has increased by 115 percent. Based on current estimates of the number of new LNG tankers being built, the incremental crewing needs for these vessels has been estimated to require the entry of 9,000 mariners into this field.

Significantly, the Coast Guard and Maritime Transportation Act of 2006 amended the Deepwater Port Act to promote the use of U.S. personnel and U.S.-flagged vessels in the LNG industry. The Act gives priority status to the processing of license applications for offshore LNG terminals if the proposed facilities will be supplied with LNG carried by U.S.-flag vessels. In response to the incentives provided by the Act, several companies have made commitments that at least 25 percent of the crews on the foreign-flag LNG vessels serving their offshore terminals will be comprised of U.S. mariners (generally officers) by 2012. Recently, Woodside Petroleum, an Australian firm, has even agreed to flag the two LNG re-gasification vessels it plans to use to serve the proposed Ocean Way off-shore LNG project with the U.S. flag and to crew the vessels with U.S. crews.

¹ Maritime Administration, U.S. Water Transportation Statistical Snapshot

STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS (STCW)

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers sets qualification standards for masters, officers and watch personnel on seagoing merchant ships. The STCW Convention was adopted at the International Maritime Organization in 1978; it entered into force in 1984. The Convention represented the first effort to prescribe certain minimum professional standards for seafarers that would be applicable throughout the maritime industry. Prior to the adoption of the STCW Convention, individual governments established their own standards of training, certification and watchkeeping for officers and ratings – usually without reference to practices in other countries, which resulted in wide variations in standards and procedures. By December 2000, the STCW Convention had 135 parties, representing more than 97.5 percent of world shipping tonnage.

From 1984 until 1995, the STCW Convention's requirements were generally concomitant with the mariner documentation and licensing requirements in force in the U.S. In 1995, however, following several major maritime accidents, including the grounding of the M/V AEGEAN SEA in December 1992 on rocks outside the Spanish port of La Coruna and the grounding of the M/V BRAER in the Shetland Islands two months later, the Convention was significantly amended.

Delegations working on amending the STCW Convention agreed to concentrate their amendments on areas relating to ship personnel training standards and operational practices instead of issues dealing with improving ship construction and equipment standards. Specifically, the goal of the STCW Convention revisions was to establish the highest practicable standards of competence to reduce the prevalence of human error as the major cause of maritime casualties.

The 1995 Amendments, which imposed significant new training and education requirements on mariners around the world, including in the United States, entered into force on February 1, 1997. Originally, all mariners had to be in compliance with the Amendments by February 1, 2002, but a one-year extension was later issued giving mariners until February 1, 2003, to comply. Mariners who held licenses on February 1, 1997, had the option of renewing their licenses in accordance with the old rules of the 1978 Convention until February 1, 2003. New mariners entering training programs after August 1, 1998, were required to meet the competency standards of the new 1995 Amendments.

In the U.S., mariners are subject to the amended STCW Convention requirements if they sail beyond the U.S. boundary line on commercial vessels (the boundary line separates the bays, harbors and other inland waters from the ocean) even if the vessel is not on a voyage to a foreign country. If mariners sail on vessels less than 200 gross tons on domestic voyages that begin and end in a U.S. port, they are exempt from the standards of the STCW Convention.

Human element issues addressed by the 1995 Amendments

A fundamental objective of the STCW Convention is to establish standards of competence for the performance of tasks associated with a mariner's work on a vessel and to allow assessment to be made of whether an individual meets specific competence requirements. The 1995 Amendments also establish minimum rest periods for watchkeeping personnel and requires that all mariners receive basic safety training and achieve a minimum level of familiarity with vessel operations.

A principle of the amended Convention is that proper training, combined with the use of proper procedures and the effective application of quality management principles, will promote safe shipboard practices and in turn prevent human error or allow the detection of errors at a point when adverse consequences can be avoided. This focus is intended to significantly reduce the number of instances in which human error leads to a pollution incident or maritime casualty.

The 1995 Amendments also sought to strengthen the port state control provisions of the Convention by expanding the reasons for which a foreign ship may be detained (e.g., prohibited from departing from a port until problems/deficiencies are corrected). It also allows port state control officers to conduct direct assessments of the competence of merchant mariners. This provision allows the U.S. Government to assess the competence of mariners on foreign-flag vessels that enter U.S. ports.

The Amendments also addressed the problem of crew fatigue by requiring each person assigned duty as an officer in charge of a watch or as a rating forming part of a watch to have 10 hours of rest in any 24-hour period. As long as one rest period is at least six hours long, the 10 hours of rest may be divided into two parts, with strictly limited exceptions.

The Amendments require that seafarers be provided with safety and familiarization training to ensure that they are aware of the hazards of working on a vessel and can respond appropriately in an emergency. The training must cover personal safety and social responsibility, basic fire fighting, elementary first aid, and personal survival techniques. Automatic Radar Plotting Aids and Global Maritime Distress Safety System are required training for deck officers serving on vessels equipped with those systems. If a vessel is not fitted with those systems, the license and STCW Convention endorsement would state the limitation.

The Amendments further require that the master and deck officers on a vessel have comprehensive knowledge of bridge teamwork procedures. In the U.S., this requirement is interpreted as meaning that personnel must have the ability to apply principles of bridge resource management.

The technical regulations of the STCW Convention were revised to specify minimum standards of competence for the range of certificates to be issued under the Convention. The standards are set forth in tables with four columns that record for each certificate holder: a) the "competence" or ability to be established; b) the area of "knowledge, understanding and proficiency" within each competence; c) the "methods of demonstrating competence", and d) the "criteria for evaluating competence". The Amendments recognize the use of simulators as an acceptable method for demonstrating competence.

The Amendments require all training and assessment activities to be continuously monitored through a quality standards system to ensure achievement of defined objectives. Standards were also promulgated concerning the qualifications and experience of instructors and assessors. Specifically, the Amendments require those responsible for providing instruction to seafarers and assessing their competence be qualified for the same type and level of training or assessment they are providing.

Finally, the Amendments include new regulations on the training and qualification of masters, officers, ratings and other personnel on roll-on/roll-off ("RO-RO") passenger vessels,

which include ferries and cruise ferries. In 1997, a subsequent set of STCW Convention amendments ("V/3") added similar regulations to cover personnel serving on passenger ships other than RO-RO passenger ships. Regulations are now being developed to incorporate the STCW V/3 regulation into the U.S. licensing system to meet the requirements of the 1997 Amendments. Importantly, the proposed rule would only apply to U.S. passenger ships on international voyages to which International Convention for the Safety of Life at Sea certificates are issued.

U.S. MARITIME ACADEMY

There are many educational facilities dedicated to the training of licensed mariners in the U.S. (mariners who possess licenses are considered to be officers), including a federal maritime academy and six state academies. The academies are a guaranteed source of merchant marine officers who can help meet domestic and international crewing needs, including the crewing needs of the U.S. reserve fleets, such as the Maritime Sealift Command and the U.S. Ready Reserve fleets.

Federal Maritime Academy

The U.S. Merchant Marine Academy ("USMMA") is located in King's Point, New York. In the past four years, King's Point has produced more than 800 Coast Guard-licensed officers.

The Federal Government pays for each midshipman's education, room and board, uniforms, and books. The midshipmen are responsible for the payment of fees for mandatory educational supplies not provided by the Government. For the 2006 graduating class, the four-year cost per student was \$185,400.

Students who wish to attend the USMMA must be nominated to the Academy by a U.S. Representative or Senator. Once enrolled, a student must complete the course of instruction at the Academy and then pass the Coast Guard examination for a license as an officer in the U.S. Merchant Marine. Graduates of the USMMA must maintain their Coast Guard license for at least six years from the date of graduation.

Upon graduation, students at the USMMA must apply for and accept, if offered, an appointment as a commissioned officer in an armed force reserve component. If appointed, students must serve in that reserve component for at least eight years from the date of their graduation.

Graduates of the USMMA are also required to serve in foreign and domestic commerce or in the national defense of the U.S. for at least five years from the date of graduation. To fulfill this requirement, students may work as merchant marine officers serving on vessels documented under the laws of the U.S. or on vessels owned and operated by the U.S. or by any state or territory of the U.S. Students may also fulfill their service requirement by serving as commissioned officers on active duty in an armed force of the U.S. or in the National Oceanic and Atmospheric Administration. Students may also work in a U.S. maritime-related industry, profession, or marine science as approved by the Secretary of Transportation if the Secretary determines that service as a merchant marine officer on a vessel under the laws of the U.S. or vessel owned by the U.S. is not available to the individual.

State Maritime Academies

The state maritime academies are the largest source of newly licensed officer for the U.S, providing 70 percent of new officers in 2006. In the past four years, the state maritime academies have produced more than 1,580 Coast Guard licensed officers. The academies are located in Massachusetts, New York, Great Lakes (Michigan), Maine, California and Texas.

Pursuant to the Maritime Education and Training Act of 1980, the United States Maritime Administration ("MARAD") provides financial assistance to all state maritime academies to support the training of merchant marine officers.

Cadets who participate in the Student Incentive Payment ("SIP") Program receive a maximum of \$4,000 annually to offset school costs. SIP participants are required to complete the academy's course of instruction and pass the Coast Guard examination for a license as an officer in the U.S. Merchant Marine. SIP participants are then required to maintain their Coast Guard license for at least six years from the date of graduation.

Upon graduation, SIP participants must apply for and accept, if offered, an appointment as a commissioned officer in an armed force reserve component and serve for at least six years from the date of graduation. They must also maintain employment in the maritime industry for at least three years from the date of graduation.

TRAINING FOR UNLICENSED CREW MEMBERS

Entry Level

Unlicensed mariners can enter the field through apprenticeship programs and on-the-job training provided by individual companies. The towing, fishing, and marina industries and Northrop Grumman offer these types of programs.

The Seafarer's International Union ("SIU") also offers entry level, apprenticeship training for unlicensed personnel at its training center in Maryland, which is the largest apprenticeship program of its kind. The program is nine months in duration and provides employment opportunities for approximately 600 unlicensed apprentice mariners per year. Since inception in 1967, the school has trained more than 22,000 graduates.

Marine and Maritime Themed Schools

Currently, there are 16 marine and maritime-themed elementary, middle, and high schools in the U.S. The average size of a school is approximately 350 students. These schools typically expand the focus of regular school curriculums by including various types of maritime and/or marine training. Marine schools offer programs that integrate biology, oceanography, and marine sciences. Maritime schools provide students with the knowledge of the maritime industry and its careers. Depending on the school, graduates of maritime-themed high schools typically receive their high school diploma and may also leave the school with certifications and most of the sea service required for the position of Able Seaman or Qualified Member of the Engine Department.

Upgrade Training

In the U.S., there are 250 training providers available for licensed and unlicensed personnel and those seeking to upgrade their documents. A large number of the training providers are commercial and non-profit training facilities. State academies and maritime unions also operate training facilities that provide continuing education and upgrading courses.

MARINER STATISTICS

According to the U.S. Coast Guard, there are more than 130,000 unlicensed mariners with Merchant Mariner Documents and more than 212,500 licensed mariners. There are over 670 mariners with Certificates of Registry, which includes medical personnel, doctors, radio operators, etc. Of the more than 343,000 licensed and unlicensed mariners, over 76,700 have STCW Convention Endorsements.

The average age of a merchant mariner with a Master's license is 51, while the average age of a Chief Mate is 46. The average age of a Chief Engineer is 50, while the average age for a First Assistant Engineer is 46. The average age of an inland captain and pilot is 49. More than 28 percent of inland pilots and captains are over 55 and will be eligible to retire in the next seven years.

POSSIBLE REASONS FOR MARINER SHORTAGES

Training

The 1995 Amendments greatly affected mariners, including U.S. mariners, by creating unfunded training and certification mandates for unlicensed mariners who traditionally progressed to licensed officer positions through on-the-job training at minimal cost. Specifically, the 1995 Amendments made it very expensive for unlicensed mariners to advance up the career ladder – commonly called “climbing the hawsepipe” – by requiring mariners to pass a new and complicated set of exams to earn or renew licenses. These new standards have raised the bar for new workers seeking to advance in a maritime career and have even pushed some older workers into early retirement.

Lower level mariners have traditionally been responsible for financing their own professional training. The cost of obtaining a Master's or Mate's license to operate vessels rarely exceeded \$1,000 at a private or vocational school. With the increased training requirements, however, specialized training and certifications can now cost up to \$26,000 and employers have traditionally provided little or no funding to cover the costs of such training. For smaller vessels, STCW Convention training can cost \$650 for a deckhand and between \$2,000 to \$10,000 for a captain. There is now growing concern in industry that the cost and complexity of meeting STCW Convention requirements for license renewals and/or upgrades is reducing the pool of potential seafarers.

When the 1995 Amendments went into effect, the U.S. Department of Labor provided the Gulf Coast Mariners Association with a one-time \$4 million grant to help pay for increased training. Since the 1995 Amendments, there has not been a single, effective, coordinated program established to provide a trained pool of lower-level mariners to operate towboats, tugboats, charter fishing vessels, offshore supply vessels, ferries, and other small passenger vessels.

There is also a lack of information available to potential mariners to help them understand either how to enter the industry or to progress along a career path. The lack of recruiting and entry information coupled with the lack of information on, and even opportunities for, upward mobility may deter new recruits from entering the maritime field and may shorten careers for existing mariners.

Criminal Liability

Mariners feel that criminal liability for pollution incidents has also become an important barrier to recruitment and retention in the maritime field. Under the Oil Pollution Act of 1990 ("OPA '90") (33 U.S.C. 2701), the Refuse Act (33 U.S.C. 407), and the Migratory Bird Treaty Act (16 U.S.C. 703), mariners are exposed to criminal prosecution for a variety of legal violations. The Refuse Act and Migratory Bird Act, for example, are "strict liability" statutes that allow prosecution and conviction even when negligence or intent on the part of the individuals involved is not proven. OPA '90 has a slightly higher threshold of "simple negligence" (the failure to exercise ordinary care; to be distinguished from gross negligence) that allows mariners to be prosecuted and convicted for what some mariners feel are honest mistakes. State legislation can also make mariners liable for multiple lawsuits and can even expose them to additional prosecution for an accident also prosecuted at the federal level.

Further, under the Seaman's Manslaughter Statute (18 U.S.C. 1115), a mariner can be charged with felony manslaughter if the prosecution proves only simple negligence and the maximum punishment for offenses can be as high as 10 years in prison. Over the past several years, the statute has been used to convict crewmembers of vessels and shoreside personnel involved with vessel operations. Generally, in other industries, gross negligence must be proven in cases of alleged manslaughter.

Wages

Mariners feel their wages have not kept pace with opportunities ashore, which has also had an impact on recruiting and retention. Some maritime positions earn less today than they did 20 years ago.

The average starting salary for a 2006 graduate of State University of New York Maritime Academy was more than \$57,000. The salary range for an Able Seaman with Military Sealift Command ("MSC") is \$39,274 plus overtime. A Deck Engineer with MSC makes \$32,562 to \$37,620 plus overtime.² With a commercial company, a Third Mate's salary starts at \$66,000.³ Captains of large container ships, passenger ships, or oil tankers can earn more than \$100,000 per year.

Entry-level Ship and Boat Captains earn \$36,920 (\$17.75 hourly), while experienced Ship Boat Captains earn \$64,860 (\$31.18 hourly). With a high school diploma, entry-level Ordinary Seaman earn \$21,780 (\$10.47 hourly), while experienced seaman earn \$37,660 (\$18.11 hourly). Entry-level Mates on ships, boats, and barges earn \$36,920 (\$17.75 hourly) while experienced mates

² Website: <http://www.msc.navy.mil/apmc/opening.asp>

³ Website: <http://www.kirbycorpjobs.com/en/cms/?24>

earn \$64,860 (\$31.18 hourly). Entry-level Ship Engineers earn \$41,200 (\$19.81 hourly) while experience engineers earn \$71,600 (\$34.42 hourly).⁴

U.S.-flag commercial vessels in U.S. foreign trade and their U.S. citizen merchant mariners have competitive pressures from foreign-flag vessels and foreign crews that pay little or no taxes to their respective governments.

Many foreign nations exempt their mariners from income tax. An income tax exemption is not available to American merchant mariners, which makes it more expensive for U.S.-flag vessel operators, and harder for American mariners to get employment on U.S.-owned U.S.-flag and foreign-flag commercial vessels.

Manning

Over the years, technology has advanced, replacing seafarers and reducing manning levels. With reduced manning levels, the workload of ship's officers, including senior officers, has increased. Mariners typically have limited opportunities or conditions conducive to study aboard a vessel. Some lower level mariners feel that the pressure to reduce crew sizes has led to work hour abuses.

Lifestyle

A mariner's lifestyle is characterized by significant time away from his or her home and family. Living onboard a vessel involves close accommodations, reduced socialization, and little opportunity for shore leave. The three main psychological problems among seafarers have been identified as loneliness, homesickness, and burn out. They are caused by long periods away from home, the reduced number of seafarers per ship, and increased automation.

Factors that affect shipboard life are the adequacy of shore-side support, mental and emotional stress, and delays in the marine licensing and documentation system. Other factors include health-related physical factors (noise, light, safety, vibration, habitability); work factors (physically and mentally demanding, scheduling, fitness for duty, increased workload); mental/emotional factors (stress, image); customer/regulatory inspection factors (unreasonable requests, lack of respect for the mariner, scheduling, sleep/rest cycles while in port); health factors; entertainment factors; communication factors (telephone, e-mail access to families and social network); social factors (small crew size, camaraderie, language); and vessel support factors (maintenance, technical support, fleet age, updates).

⁴ Website: <http://www.oceancareers.com>

WITNESSES

Panel I

Rear Admiral Joel Whitehead
U.S. Coast Guard

Mr. Sean Connaughton
Administrator
MARAD

Panel II

Mr. Michael Rodriguez
Executive Assistant to the President
Master's Mates and Pilots

Mr. Carl Annessa
COO/Vice President for Operations
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Panel III

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Board Member
Maritime Academy Charter High School

Captain Jeff Slesinger
Director-Safety & Training
Western Towboat Company

Ms. Berit Ericksson
Former Executive Director
Pacific Coast Maritime Consortium

HEARING ON MARINER EDUCATION AND THE WORK FORCE

Wednesday, October 17, 2007

HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
SUBCOMMITTEE ON COAST GUARD AND MARITIME
TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2165, Rayburn House Office Building, the Honorable Elijah E. Cummings [Chairman of the Subcommittee] presiding.

Mr. CUMMINGS. The Subcommittee will come to order.

Before we begin, I ask unanimous consent that Congresswoman Laura Richardson may sit with the Subcommittee and participate in this hearing, and without objection, it is so ordered. I am hopeful that she will be joining us shortly, and I will say a little bit more about her at that time.

Today, our Subcommittee convenes to consider two inter-related topics that are of great importance to the future success of the maritime industry. Specifically, we will examine the nature, causes, and forecasts of labor shortages in the industry, and we will examine trends and innovations in maritime innovation.

According to the U.S. Department of Commerce, ports are the gateways through which 80 percent of our Nation's foreign trade enters our Country. Commerce in our Nation's maritime sector accounts for approximately \$750 billion of U.S. gross domestic product.

Waterborne trade, which totaled 2.3 billion metric tons in 2005, is increasing at a startling rate, and the growth in imported cargo, combined with our own domestic production, is creating freight volumes that are straining our transportation networks.

At the same time, significant changes continue to transform the experience of working in the maritime industry.

No longer is the sailor's life necessarily one of adventure, offering a young person the chance both to learn about sailing through on-the-job experiences at sea while occasionally spending weeks exploring port cities around the world.

Deadlines and cost margins are tight and ships sail with the fewest possible number of crew members, who are expected to fulfill multiple duties while keeping regular watches, and who usually spend no more than a few hours in any port.

The significant changes occurring in the maritime industry appear to be contributing to labor shortages that, in turn, threaten to further strain the industry.

The nature and extent of the shortages is not well quantified and they appear to vary by type of mariner and type of vessel. An important part of our job today is to understand these shortages and to project their potential impact on the various segments of the U.S. maritime industry.

Based on data the United States Maritime Administration has provided, however, we know that the average age of a mariner with a Masters license is 51, while the average age of a Chief Engineer is 50. Figures also suggest that nearly 30 percent of inland mariners will be eligible to retire in the near future.

There are likely many factors that can contribute to a labor shortage in the maritime industry, and just as the extent of the shortages is not known, the impact of each factor is difficult to assess.

Certainly, the lifestyle associated with the maritime industry presents unique challenges. While the lure of the sea has been a siren song to many throughout the ages, many people are also lured by the call of home, and they may prefer to relax with their families at the end of the day rather than retire to a small cabin at the end of a hard shift. Wage differentials between jobs at sea and jobs on land may contribute to shortages, particularly when combined with the lifestyle challenges of life on the water.

Further, significant new standards for training and continuing education have been applied to mariners through the 1995 amendments to the Convention on the Standards of Training, Certification, and Watchkeeping.

These standards serve the critical goal of improving safety in the maritime industry and reducing human factors as the causes of maritime accidents, but they have also had the effect of imposing expensive and time-consuming training requirements on mariners, particularly on unlicensed mariners seeking to climb their way up the hawsepipe to command a ship.

There are certainly outstanding facilities in the United States that help train individuals to enter the maritime industry and to advance in their careers, such as the Paul Hall Center for Maritime Training in Piney Point, Maryland, run by the Seafarers International Union, which I have had the honor of visiting, and the Maritime Institute of Technology and Graduate Studies associated with the Masters, Mates, and Pilots Union, which I have also had the honor of visiting.

However, attendance at such facilities can be expensive and require a significant commitment of time that maritime schedules may not allow a mariner to easily make.

Further, we need to assess whether current maritime education programs have the capacity to meet the demand of those who are just now entering the maritime industry.

In short, our hearing today is intended to enable us to draw a comprehensive picture of the personnel situation of the U.S. maritime industry.

Our examination will inform the future development of policies needed to ensure that our Nation has the labor we need to keep maritime commerce flowing and to ensure that those contemplating working on the water will have the chance to advance along a career path that brings them new opportunities.

Before I recognize the Ranking Member, I also want to discuss for one moment a trend in maritime education that is of significance to me, and that is the growth or, I might say, re-growth of maritime-themed high schools across the Nation.

In his written testimony, Captain Art Sulzer, who will appear on our third panel, has presented a very comprehensive discussion of the past history of high school-level maritime education as well as the successes of and challenges faced by new maritime-themed high schools being created today.

Shortly after becoming Chair of this Subcommittee, I learned that my own city of Baltimore had established a maritime-themed high school some five or six years ago.

After visiting the school, I learned that it had been achieving impressive test results and graduation rates, but the school system had not made the investments necessary to ensure that the school was truly offering a maritime education and could prepare students for work in the maritime industry.

Over the past summer, I have been working closely with a very dedicated group of individuals from the Baltimore maritime community, including former Congresswoman Helen Bentley, to ensure that the promise inherent in the school's name, Maritime Industries Academy, was fulfilled and that students could receive a maritime education that would be meaningful.

We have succeeded in revitalizing the school's Junior Naval ROTC program and have introduced a guest lecture series to bring the maritime community into the school.

We are poised to achieve even greater results with the creation of a new advisory board that will guide the school through the process of applying for a charter, which will hopefully give the school the flexibility it needs to support an expansive maritime curriculum.

I want to briefly acknowledge the significant contributions that many of those who are joining us today are making to the development of this project, including Administrator Connaughton and his staff members, Sharon LeGrand, Shannon Russell, and Richard Corley, who continue to bring the resources of the Federal Government to support this school. MARAD also put us in touch with Captain Sulzer, who has been a key advisor. I also want to pay special tribute to Dick Fredericks for his hard work. I also thank Mr. Mike Rodriguez, Walt Megonigal, and the Masters, Mates, and Pilots Union and its MITAGS institution; Augustin Tellez and the Seafarers International Union; and Admiral Craine, the President of the New York Maritime Academy, which is creating a new partnership for maritime high schools in which I look forward to having Baltimore Maritime Industries Academy participate.

Every time I visit the school, whose advancement has become a top priority for me, I see first-hand the challenges, but I also see the possibilities of maritime education and I gain a new kind of insight into the maritime industry that I frankly have not received from any other source.

My experience with this school also makes the subject of today's hearing very personal to me.

I am truly hopeful that school districts around the Country can benefit from the lessons that those who are testifying today are

learning regarding how best to support the development of maritime schools and open such schools in their local communities.

I look forward to the testimony of our witnesses, and now I yield to our distinguished Ranking Member, Congressman LaTourette.

Mr. LATOURETTE. Thank you very much, Mr. Chairman, for the recognition. I have to apologize this morning for being a little bleary eyed. It took longer for the Cleveland Indians to dispatch the Boston Red Sox than I had hoped last night.

[Laughter.]

Mr. LATOURETTE. This morning, the Subcommittee will hear from several witnesses on the state of the maritime workforce and the recommendations for enhancements and initiatives to attract and retain workers in the maritime trades. Our Nation's economy depends on a well trained and skilled maritime workforce, and I look forward to hearing the witnesses' suggestions.

Earlier this year, I introduced H.R. 1605, which was titled the Merchant Mariner Credentials Improvement Act of 2007. I am very grateful to you, Chairman Cummings, and also to Chairman Oberstar, for including this bill as a part of the larger Coast Guard authorization bill, and I look forward to working with both of you to enact those provisions in the law.

These provisions include common sense changes to the Coast Guard's documentation and licensing processes. The bill would authorize maritime workers to renew their documents and licenses before their existing credentials expire, allow the Coast Guard to temporarily extend the validity of credentials, and reduce the number of times that maritime workers would be required to appear in person and be finger-printed for Federal documents.

The bill also would allow newly hired workers to start working in an interim clearance status before they receive the transportation worker identification card. Lastly, the bill recognizes the impacts that a shortage in the number of merchant mariners would have on the U.S. fleet, our economy, and our national security. I look forward to hearing the thoughts of our witnesses on all of the panels today on how such a shortage can be prevented.

Again, Mr. Chairman, I want to thank you for holding this important hearing, and I thank the witnesses in advance for their testimony, and yield back.

Mr. CUMMINGS. Mr. Baird.

Mr. BAIRD. I thank the Chairman for holding this meeting. The problem you are addressing today is part of a problem throughout the transportation industry, and I will just make a brief plug. Phil English and I have created a caucus called the Career and Technical Education Caucus to address precisely these concerns.

And though I am a former university professor, back home I hear more requests for people who can drive diesel trucks, repair diesel engines, hang drywall, fix electrical wiring, etc., than I hear for liberal arts majors. Nothing against the liberal arts majors in the crowd, including myself, but we need to do a lot more for career and tech ed in this Country. We have a paradox of people worried about jobs being exported overseas. Even as employers today, with high-paying jobs, can't find skilled workers to fill those jobs. So I would hope that this is the first of a series, perhaps, of hearings we have on this issue of the need for a skilled workforce.

Finally, I would urge Members on both sides, when we talk about the importance of making a college education more affordable, to add the words career and technical education, because there are well-paying, decent jobs that people can put food on their table for their families and serve this Country quite well, and we need to give career and tech ed every bit as much status as we give to college education.

I yield back. Thank you.

Mr. CUMMINGS. Thank you very much, Mr. Baird.

Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman. Very brief opening statement.

Good to have you all with us this morning, gentlemen, Admiral.

An issue I want to determine, and I think will be addressed today, Mr. Chairman, is whether or not the Federal Government has a responsibility to provide training or to ensure the availability of training for mariners working in the private sector. I suspect that will be addressed by one or both of our witnesses, and I thank you for having the hearing, Mr. Chairman.

Mr. CUMMINGS. Mr. Bishop.

Mr. BISHOP. Thank you, Mr. Chairman. Thank you for holding this hearing. In the interest of time, I will submit my opening statement for the record.

Mr. CUMMINGS. Thank you very much, Mr. Bishop.

Mr. Gilchrest.

Mr. GILCHREST. Thank you, Mr. Chairman. A couple of brief remarks, buttressing what previous Members have said about the need for engineers down to dock workers in the maritime industry. By the year 2020, I understand the volume of cargo is going to double, the number of vessels will double, but the number of ports will probably diminish; and the concentration of that cargo going into those ports is going to require the best kind of intellect that the engineers, the dock workers, and we have to offer.

I would hope that during the course—and there is no question that education in the whole range of the maritime industry is necessary and we need to put our best people into that and our best efforts, and back it up with dollars to make those opportunities possible, because they are essential and the American public utterly depends on the maritime industry for virtually everything they purchase at our stores.

As we go through this, though, this that we are describing today is human activity, and it is human activity impacting, more than likely, in a degrading fashion, on very limited resources, that is, the environment; and the ecology, the environment upon which we ultimately depend, is only now as resilient as our understanding of that ecology is. So as we go through the fact that we need technical schooling, we need engineers, all the way down to dock workers, every one of those individuals needs to also understand their place, the impact this industry has on those vital natural resources. So human activity is important in this maritime industry, but it also needs to be and can be compatible with nature's design.

I represent the Chesapeake Bay, and we are also discussing, and more often than not disputing, where dredging needs to take place, where a whole range of other activities concerning ballast water,

invasive species, all of these things need to take place. We now know enough information so we don't have to sacrifice the Chesapeake Bay so people in Missouri and Minnesota and Colorado and Maryland can have the goods they need to purchase to improve the quality of their life.

So as we go through this process, an understanding of where we fit in nature's design will certainly benefit our posterity.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Mr. Gilchrest.

Mr. Poe.

Mr. POE. Thank you, Mr. Chairman. I am concerned about how we got in this situation. If we know how we got in this situation, maybe we can rectify it and not continue to be, in my opinion, a dire situation. Also, has the Federal Government, with its regulations, made this worse or is it making it better? I would like some candid answers on the role of the Federal Government; does it get in the way or does it help.

And with that, Mr. Chairman, I will yield back. Thank you.

Mr. CUMMINGS. Thank you very much.

That being the end of the opening statements, we will now hear from Admiral Joel Whitehead, Commander of the Coast Guard's Eighth District, and Mr. Sean Connaughton, Administrator of the United States Maritime Administration.

Thank you, gentlemen, for being with us. You will have five minutes to provide a summary of your testimony and then we will have some questions.

TESTIMONY OF REAR ADMIRAL JOEL WHITEHEAD, U.S. COAST GUARD; SEAN CONNAUGHTON, ADMINISTRATOR, MARAD

Admiral WHITEHEAD. Good morning, Mr. Chairman and distinguished Members of the Subcommittee. I am Admiral Joel Whitehead, Commander of the Eighth Coast Guard District in New Orleans. The Eighth Coast Guard District is the largest of nine Coast Guard districts and covers 26 States, more than 1200 miles of coastline, and 10,300 miles of inland waterways from Florida to Mexico and including the entire navigable lengths of the Mississippi, Ohio, Missouri, Illinois, and Tennessee River systems. I am pleased to have this opportunity to be with you today and to discuss the Coast Guard's role in maritime education and workforce.

The Coast Guard sets standards of training and qualification for seafarers and administers the Mariner Licensing and Documentation program in compliance with domestic and international laws. The aim of the Mariner Licensing and Documentation program is to ensure that the U.S. merchant marine vessels are manned by qualified, trained, and competent personnel.

In 1978, the International Maritime Organization adopted the Standards of Training, Certification, and Watchkeeping for Seafarers Convention of 1978. The U.S. deferred ratification efforts and worked for over a decade to make the necessary changes to our licensing regulations to comply with the Convention. The U.S. became party to the STCW Convention in 1991.

The STCW Convention was significantly amended in 1995. The amendments were comprehensive and detailed, resulting in more

consistent training worldwide. Competence-based standards were established that placed emphasis on the requirements for training and assessment of skills in almost every facet of a mariner's profession.

To meet our Convention obligations, the Coast Guard published an interim rule on June 26th, 1997, implementing the 1995 amendments. The rule retained the existing licensing structure in the United States; it incorporated the STCW training and practical demonstrations of skill requirements, and included oversight of the training. This rule impacted mariners serving on commercial seagoing vessels of over 200 gross registered tons, whether operating on domestic or international voyages, and resulted in increased training costs to the mariners. Mariners serving on seagoing vessels of less than 200 gross registered tons on domestic voyages and mariners serving on non-seagoing vessels, such as inland towing vessels, were not impacted by the rule.

The Coast Guard is currently reviewing the 1997 interim rule and is considering seeking additional comments to ensure that we continue to meet our obligations under the Convention. The review is necessary to incorporate lessons learned during the 10-year implementation period, to clarify issues that generated confusion to mariners, to address the comments on the interim rule, and to address recommendations from the 2003 independent evaluation of the credentialing and licensing program.

In January of 2007, the IMO began a comprehensive review of the STCW Convention that will take several years to complete. The review is restricted to a limited number of issues to avoid any unnecessary amendments or reduction of the very successful training regime and subsequent impact to industry. The comprehensive review presents an opportunity to look for alternative training approaches not considered during the 1995 amendments that may help alleviate the burdens imposed by the implementation of STCW.

The Coast Guard has engaged the Department of Homeland Security's Merchant Marine Personnel Advisory Committee, or MERPAC, to provide recommendations on the issues to assist in the development of the positions for the United States.

The Coast Guard has also partnered with MARAD to oversee and evaluate the implementation of STCW by the U.S. Merchant Marine Academy and the six State maritime academies. Furthermore, the Coast Guard has supported and fostered discussions on mariner recruitment and retention to address training related issues that would contribute to the shortage of qualified U.S. mariners.

The Coast Guard believes that the STCW has significantly enhanced the safety and security of the United States by requiring foreign vessels calling on our waters to be manned with competent crews. The Coast Guard does recognize that implementing the requirements of the STCW Convention for U.S. seagoing vessels has imposed a financial burden on our mariners, and we continue to examine methods that may potentially reduce some of the challenges associated with the implementation of the STCW requirements.

The Coast Guard is also undergoing several initiatives that aim to positively impact industry, and for the past 12 months the Coast Guard has been proceeding with its project to restructure and cen-

tralize the mariner licensing and documentation program. Since June, the National Maritime Center has been focused on improving its internal customer services processes to issue mariner licenses and documents faster and with a higher degree of accuracy and consistency.

In August, as a result of the process improvements, the NMC reduced the inventory of credential applications being processed by 39 percent and issued over 2,000 mariner credentials, reaching a new production record. While the overall processing time remains higher than desired, the average license renewal processing time has decreased by 25 percent since June.

I thank you for this opportunity to discuss maritime education and workforce, and I would be pleased to answer any questions you may have.

Mr. CUMMINGS. Thank you very much.

Mr. Connaughton.

Mr. CONNAUGHTON. Mr. Chairman, Mr. LaTourette, Members of the Subcommittee, it is a great pleasure for me to be here today to talk to you about some of the challenges that we are facing, but also some of the great opportunities that people have if they enter into the maritime industry and what a great career it is. Mr. Chairman, I have a prepared statement I would like to enter into the record and summarize my remarks, sir.

Mr. CUMMINGS. So ordered.

Mr. CONNAUGHTON. As you mentioned, sir, we are facing some challenges today, primarily due to, first, the strength of the American economy, the fact that we are seeing enormous recapitalization in the maritime industry, particularly in the brown-water fleet, the offshore industry, and the coastwise fleets. These have obviously meant that we are seeing a greater demand for waterborne transportation and also the people that man the vessels.

But, in addition, we also are facing some challenges when you look at the actual personnel themselves. First is retirements; the second is that many people are not necessarily perceiving maritime industry as a career; regulatory hurdles; and other types of concerns, particularly in the criminalization of certain types of acts of accidents have made going to sea or going and working in the maritime industry less attractive than it was in the past.

In addition, we are also seeing an enormous challenge internationally with the shortage of mariners practically around the world. In fact, we are looking at most of the industry very actively recruiting mariners of every different nationality, and we are seeing that actually in the United States with foreign companies coming to the United States and actively recruiting American mariners.

The Maritime Administration runs several programs that this Committee oversees regarding the training of mariners. The most prominent is the U.S. Merchant Marine Academy, which is part of our Administration. We currently have around 1,000 cadets and graduate a little over 200 every year. Also, we are very much involved in the education and the programs of the State maritime colleges; we provide the training ships as well as direct payments to the schools and individuals through the student incentive payment program.

We do provide some post-graduate types of training through the Merchant Marine Academy's GMAT School. But, obviously, for the most part, these programs have been very much focused on the deep sea mariner and not necessarily the different types of challenges that we are facing today in the United States, particularly in the brown-water industry and the offshore industry.

What we have been trying to do, sir, is since these—I have been in office just about a year, and, traveling quite a bit, I have started hearing, anecdotally, many of these concerns being raised by employers and mariners about some of the challenges they are facing. One of the first things that we are trying to do is get out a survey to the industry to actually get some data behind some of this anecdotal information. We are nearing the final stages in getting that approved and out to the industry.

Also, we have actually upgraded what we call the mariner outreach system, which allows mariners to actually come in and file with us so we can keep track of what is happening, particularly in the offshore and the deep sea industry. Right now, we have around 41,000 mariners who have signed up for that program.

We are reaching out to many of the industry associations and labor management, labor organizations, to work with them and get a better handle about what is happening in the industry. We are trying to find expanded opportunities with the Department of Labor. We have been working with them initially with the shipyard industry, because, obviously, in this recapitalization that we are experiencing in the industry, they are having the same types of challenges, finding and keeping shipyard workers; and we have actually been able to take some initial steps in setting up some nationwide programs to help the shipyard industry, and now we are trying to explore whether we can take that and potentially deal with it and bring it out to the mariner community as well.

One of the things that we continually find some challenges with is finding training opportunities for our cadets at the Merchant Marine Academy and also at the State maritime schools, so we have been reaching out to the broader maritime community to see if we can get more cadet berths. I am happy to report that we have had the first agreement signed just this week with an Overseas Shipholding Group, which will potentially open up at least 100 more ships to mariners, primary in the foreign flag, but it is an American company.

We also have some other American companies which have sizeable fleets who have indicated that they are willing to take American cadets onboard so we can start to get more people trained, because one of the challenges that we are facing is that one of the biggest limitations for the expansion of the enrollment in many of the State maritime schools is the fact that we have training ships for them, but they are limited in their capacity, and because we can't expand the capacity of those vessels, necessarily, we have to look for some of these other opportunities if we want to actually get more people going to the schools and graduating with licenses.

In addition, the cadets, graduates from the Merchant Marine Academy and those students from the State maritime schools who actually take the student incentive payments from us have a certain obligation that is in the law. Part of that obligation is obvi-

ously to keep their license for six years and go to sea. What I have done is change the obligation to allow the service in the brown-water inland industry to meet that obligation, so that students know that, once they graduate, they can actually go to work in the inland industry and then meet the obligations that they incurred.

Also what we are working very diligently on is, as you mentioned, Mr. Chairman, working with some of these high schools programs, because we think that one of the things is making our youth aware of the maritime industry and the opportunities that exist and the career that now exists in the industry. If we can get to them early, get them those skills, get them that familiarization, that will hopefully make them more interested in going to sea and going to work in the maritime industry. So we are trying to get to them as early as possible.

In our recent realignment of the maritime industry, we actually did establish an office that is completely dedicated to workforce development. Sharon LeGrand, who you mentioned, is actually part of that office, and that office's whole purpose is really to work on some of these program and policy issues and do much more outreach so we can end up, again, getting a much more consistent approach on how we go after some of these workforce development issues.

We are also working very diligently to revise our own regulations. These regulations that we have today that govern the State schools, govern the Merchant Marine Academy, our training programs, is well over 20 years old. The challenges that those regulations were originally developed in are not the challenges we are facing today, so we will hopefully be coming out with some revised regulations early next year.

So, Mr. Chairman, these are some great challenges, but incredible opportunities. Particularly, I just want to leave one thought, an act that this Subcommittee took a few years ago. The Committee came forward with some revisions to the Deepwater Port Act. Those changes allowed us to broach the subject of taking American mariners and American flagged vessels in this growing LNG trade. I am very happy to report that we now have commitments from two companies to start to take onboard American mariners onboard the LNG vessels calling in the United States. We have a commitment from another company, Woodside Natural Gas, to actually have two American flagged LNGs if their deepwater port license is approved, and we believe we will shortly be announcing another company's commitment to have an American flagged LNG as well. So, again, some great opportunities that are there for us if we are willing to try to go out and take it.

So it is a great pleasure for me to be here. Again, we have got challenges, but we have got some great opportunities for the men and women who are in the maritime industry that can have a great career ahead. Thank you, sir.

Mr. CUMMINGS. Thank you very much, Mr. Connaughton.

A little bit earlier in the hearing I had asked unanimous consent that Congresswoman Laura Richardson sit with our Subcommittee to participate in this hearing and it was ordered. She is with us now, and in the way of introduction, Congresswoman Richardson has been elected to represent the 37th District of California, for-

merly represented by our distinguished colleague, Ms. Juanita Millender-McDonald, who was a dedicated Member of the Transportation Committee and of this Subcommittee.

While Ms. Richardson has been assigned to the Transportation Committee, her Subcommittee assignments have not yet been announced, but we eagerly anticipate she will serve on our Subcommittee, and we welcome her to her first hearing with us today.

Ms. Richardson's district includes the Alameda Corridor, which provides transportation to and from the Port of Long Beach, one of our most vital ports, and she has previously worked on transportation issues both as a member of the California Assembly and the Long Beach City Council. I know she understands from the unique position of her district the transportation challenges we confront as a Nation, and she shares our Subcommittee's concern to ensure that our Nation's maritime industry is as strong as it can be.

So, to Ms. Richardson, we welcome you, and I will yield to you for a response.

Ms. RICHARDSON. Thank you, Mr. Chairman, and I appreciate that very kind welcome by both yourself and the Committee.

You know, it was kind of interesting when I went back to school and got my master's in business, I had an opportunity to choose to go overseas and study goods movement and trade in China, so I have been both to Hong Kong, Shanghai, and Beijing, and have had an opportunity to see their tremendous growth, which also impacts how we move forward in this Nation.

As was stated by the Chairman, coming from the 37th Congressional District, I noted in the background that we expect an increase doubling of our cargo over the next five years, and it states that the majority of that will be in very concentrated areas. And I guess I should say either congratulations or challenges to me, because I happen to represent 45 percent of the entire Nation's cargo goes through my district.

So we will be gladly working with this Committee to carry, I think, really, something that is going to be good for this Country if we do it wisely, and I look forward to future legislation that we will enact to enable that the maritime industry is very successful.

With that, Mr. Chairman, count on me, and I hope to make you very proud, and my other colleagues, by my representation.

Mr. CUMMINGS. Thank you very much.

Now to the five minute questioning.

Mr. Connaughton, you talked about the survey of U.S. vessels operating in the industry and you mentioned in your testimony it would be completed fairly soon, I think you said, that it was in its final stages. As I am sure you are well aware, this Committee deals with timetables and deadlines because we are concerned that if we don't do that, nothing gets done. So we want to make sure you give us a timetable so we can hold you to that. What is it?

Mr. CONNAUGHTON. Well—

Mr. CUMMINGS. I am not trying to put you on the spot, but—
[Laughter.]

Mr. CUMMINGS.—but I am very serious about that. We have one life to live—this is no dress rehearsal—and we try to get things done. So we don't want to be here 10 years from now talking about the survey, when you are off to another job.

Mr. CONNAUGHTON. Well, Mr. Chairman, I appreciate the question because I thought we—well, there is a process that we must follow, as a government agency, to go out and request any information from the public and from business. We have been working very diligently to get that survey through that process. We initially had to publish in the Federal Register a notice that we were going to do the survey. We have gotten that through the system. We are now down to the point of where we have had now to get the actual questions cleared through the system, and it is our hope that that process will be completed in the next several weeks. Our goal was to get it out much sooner than this; it is just that the system is the system.

So I would like to tell you that we would—our goal is to have it out by December 1st.

Mr. CUMMINGS. All right.

Mr. CONNAUGHTON. And we will keep you very much informed, sir, of what the status is.

Mr. CUMMINGS. And we will be talking on the last day of November.

Mr. CONNAUGHTON. Yes, sir.

[Laughter.]

Mr. CUMMINGS. Let me ask you this. Let me go to something that you said that I found very interesting, when you talked about high schools. There are only a few maritime high schools in our Country, and it concerns many Members of Congress that we have so many young people who don't even know, don't have a clue, about the jobs in the maritime industry. I think one of my colleagues said it a few minutes ago, where people can get a job and make sufficient funds to support their families and, sadly, I think we don't start young enough. In other words, we don't expose them early enough. And I am just wondering, considering there are only a few high schools now, do you have any goals to try to reach out to various school districts?

You know, the trend in the Nation today is to have these specialized high schools. In Baltimore, they have got them for homeland security, they have got them for firefighters, all kinds of different things, technology, and I am just wondering what are we doing, considering the fact that this is an industry—and I have read your testimony, which was well done, by the way, and it talks about the needs and projects the needs. But I am just wondering, at the end of your tenure, do you have a goal of addressing that issue, and to what extent, under your watch?

Mr. CONNAUGHTON. Mr. Chairman, it is amazing to me to see where we are today with regard to demand and the interest in mariners, in American mariners. One of the things, as I have gone around the Country, I have had the opportunity to meet with people in New Orleans, Charleston, our folks have met with yours in Baltimore, as well as up in New York about the interest in starting up some of these programs. There are already some of these high school programs. The issue is how do we come up with potentially a model curriculum to get some of these programs, which still use or say that they are maritime, that are not necessarily in that direction any more, even though they may use that title.

It is now the fact that we can point to them that they have a career and they have opportunities. Here we are, just three or four months after the graduations from all the State schools, Kings Point, and we are looking at 85 percent of the graduates afloat or in the military, and another 12 to 13 percent with some significant short-side jobs; and the salaries are just simply tremendous. I mean, what we are looking at is, anecdotally, everything from \$50,000 to over \$100,000 are being earned by these graduates, and the demand is there and the salaries are there, and trying to reach out to America's youth, which just Mr. Baird, I think, mentioned about how difficult is in technical—I know my previous position was in local government, and we had a very difficult time, even though you could show that bricklayers, electricians were graduating at 18, 19 years old from our technical schools, making \$60,000 a year in this area, and we had to close the programs down because many parents don't recognize that as a viable career.

We have to do the same thing. I know that it is a problem. I think a challenge for all of us is to make people understand that 95 percent of the Nation's trade and cargo comes by water, is transported by water, and that this is—especially with the growth in trade, as Mr. Coble and Mr. Gilchrest mentioned, it is going to continue to grow. We are going to become more dependent on our maritime highways and this is a career path that has unlimited potential.

Mr. CUMMINGS. Mr. Connaughton, you didn't answer my question. Let me restate it. I want you to tell me that by the end of your tenure you have certain objectives with regard to our high schools. Do you or don't you? You can just say that, yes or no, and then I can go a little further. In other words, we have a limited time to act, and you have been blessed to be placed in this position. I am glad to know you have local government experience. What I am trying to get to is I would like for you, if you agree with me, to make that one of your top priorities, to try to establish more of these high schools.

And I agree, with the content, they have got to be, content-wise, what we need. The school in Baltimore, to be frank with you, when they created the school, they did not give it the content that they needed, and that is what we are doing now. But these young people are eager. They are so excited about this school, and it is in the inner city of Baltimore and, basically, we anticipate that, in a year, people will be knocking down the doors trying to get into this school. And I believe there are a lot of youngsters all over our Country that, if they only knew—and if the parents; we have got to educate parents, you are absolutely right. But I am asking you are you committed to trying to do that under your watch.

Mr. CONNAUGHTON. Mr. Chairman, very much so within the constraints of the resources I have.

Mr. CUMMINGS. I understand.

Mr. CONNAUGHTON.. I have entirely five people dedicated to all the manpower issues across this industry and we have one person that I have essentially focused on these high school programs, and the goal there is to develop a model curriculum that we can then share with school districts, starting with yours, but then sharing with school districts around the Country. But the thing is that,

again, that is a priority, but within the fact that we are a very small agency and obviously we have had many funding issues in the past and we are down to just the four or five people that I have now pulled in and created this office to deal with these types of issues.

Mr. CUMMINGS. Well, we want to see if we can't perhaps help you get more funding, perhaps in the future, so that you can carry that out.

Last, but not least, let me ask you this. Does the Maritime Administration have an advertising budget? If our goal is to reach out to non-coastal areas, in addition to reaching areas that are on the water, is it possible for MARAD to develop an advertising campaign to make people aware of the maritime industry and let them know that they are needed?

Mr. CONNAUGHTON. We have no funds, sir, none at all.

Mr. CUMMINGS. So we have got this great need, but we have no way of letting people know.

Mr. CONNAUGHTON. I think I have two or three people in my public affairs shop and, for the most part, they are reporting things that are happening in the press versus being out there.

Mr. CUMMINGS. Well, we want to work with you on that.

I see my time is up.

Mr. LaTourette?

Mr. LATOURETTE. Thank you, Mr. Chairman.

Admiral, in your oral statement, and I think in your written statement, you indicated that the Coast Guard is cognizant of the fact that some of the new training requirements under STCW and maybe TWIC, as well, are causing an additional financial burden on mariners. I made a note; I thought you said that the Coast Guard is examining that. Can you sort of describe the examination and then tell me whether or not the Federal Government, to your knowledge, has ever participated in providing funds to mariners for these additional training requirements and if you are authorized to do so?

Admiral WHITEHEAD. Yes, sir. We are very aware that the cost to mariners associated with the STCW Convention requirements are costly, particularly for those that are at the more senior levels, the Masters, the Chief Engineers. Those costs can be very much, they can exceed \$20,000 for a full round of STCW training requirements. So we are aware that it is very costly.

We are looking into and working with a variety of industry training schools into ways that we can bring training in approved training courses through different means that would be much less costly, perhaps. For example, we are looking into computer-assisted training, long-distance training, things that actually, in the United States Coast Guard, we are beginning to use for our own personnel. We are trying to involve those training entities out there to begin to use those sorts of things.

The Coast Guard, to my knowledge, does not have any funding directly associated with that, though there was a history of, at one period, of some grants that I believe were provided to MARAD at one point for training, but at this point we don't have funds for that.

Mr. LATOURETTE. Two points on that. I understand you don't have the funds. Do you think, if you had the funds, you would be authorized to make that funding available?

Admiral WHITEHEAD. I am not aware, sir, that we have a legislative authority for using such funds. We certainly get involved in many issues, particularly at the local sector level, where there are industry days, for example, and we will send Coast Guard personnel out to industry days and to assist. We recently did one in Greenville, Mississippi that was recently sponsored, which was very beneficial; MARAD was there as well, I believe. And I think this is opening up, in many ways, to people in the heartland of the Country and inner cities, if it can be done right, the availability and the real jobs that are out there.

Mr. LATOURETTE. Maybe that is something, Mr. Chairman, we can look at as we move forward with our authorization.

Administrator Connaughton, you mentioned the LNG trade, and we have had a number of hearings on LNGs. Specifically to the Merchant Marine Academy and the six State marine academies, is there additional capacity at those facilities to accommodate more cadets?

Mr. CONNAUGHTON. It is restricted, sir, it is limited. Basically, with the State maritime academies, the capacity is really limited by the school ships. The school ships that we provide have a certain number of berthing. The sea days that they obtain on those cruises are essential to getting the sea service necessary to get their licenses. The Merchant Marine Academy has essentially been capped at a certain amount. Right now, we have around 1,000 students. We graduate a little over 200 every year. So there are some self-limiting issues. We have tried to, especially now, we are trying to open up more cadet berths that will allow at least the State schools to potentially increase enrollment. But, for the most part, I think Admiral Craine will be testifying later on and I think he will verify this, that it is the school ships, it is the size, the age, and the ability of the school ships to handle certain capacity. That is one of the biggest limiting factors.

Mr. LATOURETTE. Last question. The Chairman had a hearing a little earlier on the TWIC card, the transportation worker identification card. We had Homeland Security here and a number of Members of the Subcommittee expressed some disappointment with the progress of that. But in reviewing the testimony of the witnesses that will appear after you, there is an assertion by some that the requirement to have a TWIC card is perceived in the maritime industry, in some sectors, to be a deterrent from folks entering the industry.

Admiral, I invite your comments on that observation that we will hear later.

Admiral WHITEHEAD. Sir, I don't go to any maritime event anywhere in the Eighth Coast Guard District where I don't hear about the TWIC cards, as I am sure you do here as well. I have heard, anecdotally, that this is a deterrent or somewhat of a barrier; it is another cost that is associated with it. I was very heartened to learn, in a recent briefing that I had, that the initial costs that were estimated for a TWIC card have gone down substantially, down to, I think, \$139. So I am very heartened with that respect.

I don't have any firm data to say that that is a factor, but, to be very honest, sir,—we were discussing this earlier—if I were a merchant mariner, I would be the first one on the block to have a TWIC card, because if I have that TWIC card, you are very much more marketable in your own industry and in other industries because you have got that credential that allows you entry from a security perspective. So I know this is a little bit of a difficult issue, but just yesterday, I believe, in Delaware, we had an enrollment session there. There were 25 new credentials that were issued, but there were 1,000 mariners that were pre-enrolled to get their TWIC card, and I thought that was a pretty substantial roll-out of that system.

Mr. LATOURETTE. I thank you for that answering. I know that when we had the hearing, I could never figure out why it is \$139. That seems like a strange number to me, but thank you.

And thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Mr. LaTourette.

Mr. Bishop.

Mr. BISHOP. Thank you, Mr. Chairman. I know this issue of shortage of qualified mariners has many dimensions to it, but I would like to focus on the LNG piece of it.

Mr. Connaughton, your testimony indicates that the fact that we have few, if any, U.S. flagged LNG vessels—and I know you have been successful in developing a few—that U.S. mariners are at a strategic disadvantage in a market that is going to explode—perhaps I should rephrase that.

[Laughter.]

Mr. BISHOP.—in a market that is going to expand dramatically over the next couple of years, leading potentially to safety risks, potentially to security risks. As I say, I know that you have done some work; you have been successful in bringing some U.S. flagged vessels into this market. What else can be done? What other tools perhaps can Congress give the Maritime Administration to help develop both U.S. flagged vessels and U.S. mariners in this industry?

Mr. CONNAUGHTON. Mr. Bishop, I think the law today allows us to pursue voluntary agreements, and I think we have been successful in doing so. One of the things, obviously, is that we only deal with the offshore facilities; we do not deal with onshore or those within the territorial waters. So it is kind of limited in scope as to the vessels or the applications that we can raise and broach this issue.

One of the things that we have also been working on and we are able to get the State maritime academies, the Merchant Marine Academy, and all the labor organization operated training schools to come together on a uniform standard of training, the same types of what we like to say is a model curriculum and career path training path that we will get everyone to come together on. It is actually implementing that now is what we are trying to focus on, as obviously there is a resource issue with that. And it is by making sure we have that type of pipeline.

But I think we have been doing what we have been able to do, given the current structure of the law, given the current structure of at least the resources that we have available.

I will mention one thing. We have been made aware that one of the things that is an issue is how we treat the income taxes of American mariners versus how mariners from other countries are dealt with by their own home countries that actually places our American mariners at a little bit of a disadvantage when you are looking at the general marketplace, and that is something we are trying to get a better handle on as well.

Mr. BISHOP. I know this question may go beyond somewhat the scope of this hearing, but for both Admiral Whitehead and Mr. Connaughton, is the fact that we have a bifurcated approval process for LNG facilities—some of them are under the jurisdiction of the FERC, others would be under the jurisdiction of the Coast Guard and the Maritime Administration—does that complicate this issue? I mean, is the FERC sufficiently sensitive to this issue of the qualifications of the mariners that will be serving on the vessels that will be re-gasifying these facilities? Is that something? And, as I say, I will put this question to both the Admiral and to you, Mr. Connaughton. I mean, is our process the right process? Should we not have one entity that is responsible for reviewing these applications, as opposed to two, given the fact that we have some concern about the qualifications of the mariners on these vessels?

Mr. CONNAUGHTON. I will maybe answer this from this perspective. The Coast Guard is involved in both sets of applications, particularly on the environmental side. We work very, very closely with the Coast Guard on our aspect of licensing and we are the actual licensing authority for the deepwater ports. Because of the law that you all have passed, we require and have issues that FERC does not deal with, does not raise, and one issue is financial responsibility. We require some fairly substantial financial responsibility. Because of our law, we require there to be provisions on how you will dismantle facilities after you are done.

But also, due to the law, we raise the issue of American flags; we raise the issue of American mariners. That is not part of FERC's law, so it doesn't get raised, as far as we are aware, in their approval process. So it does make it so there obviously is a bifurcated system. The only thing I will mention to you is that we are seeing more and more interest in offshore facilities due to some of the concerns and questions being raised by onshore facilities, but right now there is a different system and theirs is just, in many ways—well, they don't raise the same issue we do.

Mr. BISHOP. Thank you.

Admiral Whitehead?

Admiral WHITEHEAD. Yes, sir. I am glad you raised this issue, sir. First, I don't believe that the bifurcated process that we have got right now is really a problem. I mean, at first, I think, ramping up, there were some issues there, at least in the Eighth Coast Guard District, in the Gulf of Mexico, where we have 8 to 15, depending on how you count, LNG facilities in development. This is now going a little bit more smoother.

The whole issue of LNG permits is really almost equally owned, I think, between as an energy requirement, as a transportation security requirement. So it brings in both the Energy Department, FERC, and the Coast Guard into it.

I should also say I don't believe FERC is really involved in the issue of the qualification of the mariners, and that would be more an issue for the Coast Guard, at least from an international perspective; and I am very, very concerned about that. In the Gulf of Mexico, as I mentioned—and, Mr. Chairman, we have discussed this before—right now we have about 261 annual arrivals of LNG ships into the Gulf of Mexico annually, compared to 210 everywhere else in the United States. In fiscal year 2008, we are going to go from 261 to about 780 arrivals, and in the next four or five years after that to over 6,000 to 7,000 arrivals a year. So the whole thought of the LNG, the growth of LNG, as you mentioned before, is very, very much in my concern.

We are working with Maritime Administration to lay out the training standards that would be required for LNG workers under the STCW Convention, as well. So I am very, very concerned about the capacity, though, and you raised that as well. With all these new ships coming into the United States, it will require not only training for mariners, it will also require additional training for Coast Guard inspectors, who have to be very, very technically astute and trained with these brand new ships, \$250 million vessels that are being constructed just for this trade.

Mr. CUMMINGS. Thank you very much.

Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman.

Gentlemen, good to have you all with us. The current shortage of merchant mariners available to work aboard U.S. flagged vessels, do you classify that as a moderate problem or a critical problem?

Admiral WHITEHEAD. Sir, we don't really tally up those numbers, but I can tell you I don't go to an event, either in the United States, whether it is in the inland waters, whether it is a coastal maritime group, or if it is an offshore group, where they are not talking about the shortage of mariners and getting mariners in there. I think there is a real problem, but part of that is based upon how busy the business is. All areas of the maritime industry in the United States are tremendously busy.

I was astounded to learn, in the Eighth District, that between 2001 and 2007 our number of inspectors for marine inspectors had doubled, from 18,000 inspections a year to 36,000 inspections a year. Now, the year 2001 has nothing to do with 9/11. This is not security inspection, these are safety inspections; and they have doubled in five years, and that is because of the economy and because this business is so important to our economy. So it is a real concern to me and I hear about this all the time, but I don't really have the numbers to tell you.

I can also tell you that, internationally, I was recently overseas and met with five or six different shipowners, and I can tell you that they are facing the same exact issues, same problems. It is a worldwide demographic issue.

Mr. COBLE. Thank you, Admiral.

Mr. Connaughton, do you concur with that?

Mr. CONNAUGHTON. Mr. Coble, again, we only have anecdotal information, until we get this survey out and actually put some numbers to it. We know this is a major, major challenge and concern.

I think we are just facing a perfect storm. When you look at the increased demand for waterborne transportation, the fact that we are seeing retirements, we are seeing a lot of people go ashore because right now, especially marine engineers, any type of technical background, are really getting great job offers ashore. And then what is happening worldwide, if you look at the numbers worldwide, I will tell you right now if our numbers mirror those, we are facing a critical shortage, because the numbers worldwide are showing tens of thousands. When they do their projections, they are showing tens of thousands of licensed officers.

Mr. COBLE. And I think the shortages inevitably negatively impact the viability of the U.S. fleet, (a), and negatively impact the national security posture of our Country as well.

Back to the statement I made earlier, gentlemen. Does the Federal Government have a responsibility to provide training or to ensure the availability of training for mariners working in the private sector?

Mr. CONNAUGHTON. Mr. Coble, it has been a cornerstone of American maritime policy since 1936 that the Federal Government has a vested role, due to safety and security, national defense reasons, to have trained mariners, particularly those mariners who can be called upon during times of national emergency, which even since the 70 years since that Act was passed, we have proven time in and time out the American merchant marine and its mariners are critical to not just the economic needs of this Nation, but also its national defense, and they have always been there whenever this Nation has called.

Mr. COBLE. And are you currently authorized to make such funding available?

Mr. CONNAUGHTON. Sir, yes. Well, our programs today, our principal programs, between the Merchant Marine Academy and the six State maritime schools, are really geared towards the deep sea mariner and what has been traditionally viewed as the most essential for the national security and economic interests. I think what we are seeing now is that many of the State schools, even our GMAT school, as well as employer-run and labor organization-run schools, are starting to deal with some of these other issues that are being faced. But, for the most part, our programs really have been geared toward the deep sea mariner, and we are now trying to make them available to the brown-water inland types of fleets.

Mr. COBLE. I thank you.

Admiral, do you want to add anything to that?

Admiral WHITEHEAD. No, sir, I don't really have anything to add.

Mr. COBLE. Gentlemen, thank you for being with us.

I yield back, Mr. Chairman.

Mr. CUMMINGS. Thank you very much.

Mr. Taylor.

Mr. TAYLOR. I want to thank our witnesses for being here.

I am curious, Mr. Connaughton, with the problems that both the Navy and the Coast Guard have experienced in acquisitions and with the decision by Secretary Winter and I think also by the Commandant of the Coast Guard to try to bring the acquisition programs back in-house, as opposed to turning them over to the private sector, has there been any discussion with you, the Merchant

Marine Academy or the other maritime academies, of explaining this programs as far as design and ramping up those acquisition programs to bring back what the Navy refers to as a supervisor of shipbuilding? And if so, is that complicating the problems that you have outlined in your testimony or is that something that is just kind of on the edge and only marginally adds to your challenges?

Mr. CONNAUGHTON. Mr. Taylor, we at the Merchant Marine Academy and at the State schools, many of them have a sub-major or a major that involves shipbuilding and shipyards. However, for the most part, almost all the programs, at least that we are involved with, are really geared towards making sure we have merchant marine officers. We haven't attempted to address that type of issue. We recognize very much that many of the shipyards are facing some enormous challenges themselves in finding people, but that is actually not in the acquisition side, but really focused on the actual technical and detail issues of the shipyards.

I just want to mention one thing to you, that I have become very diligent in ensuring that we grant few, if not—well, I limit the number of waivers that are available to graduates from this year from the Merchant Marine Academy—I will be looking at the State schools as well—regarding their obligations and whether they can go ashore. Because of the great job market and the fact that we need people onboard these vessels of every size, I am pushing them to go to sea and fulfill their obligation. The only exception to that is that I have allowed a certain percentage to work in the shipyards because of recognizing their issues and problems, and we can't have these good challenges of recapitalization and more vessels without the yards to produce them. So I have been allowing some graduates to actually go into the shipyards, but we have not been focused on the acquisition side, sir.

Mr. TAYLOR. Just as a matter of curiosity—and maybe, Admiral, this would be better directed at you—I was looking at the—and I happen to have been a Member of Congress in the wake of the tragic accident outside of Mobile that led to Congressman Tauzin and others substantially increasing the training for mariners and the hurdles for mariners. I am curious, when you talk about the costs of acquiring those additional licenses and those additional courses, are the people who take these courses, are they eligible for the Montgomery GI bill if they are veterans? Is that something that the Montgomery GI bill would pay for, as if they were going to a community college or normal university?

Admiral WHITEHEAD. Sir, I am not at all an expert on that, but I would believe it is. I think we need to get back to you with an answer on that.

Mr. TAYLOR. Would you, please?

[Information follows:]

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The Veteran Administration (VA) allows the Montgomery G. I. Bill benefits be used to pay the costs of certain tests for licenses and certifications. Courses, tests, on the job training and the like are approved by the VA on a case-by-case basis after reviewing the specific programs.

Admiral WHITEHEAD. But I think that is something that sounds to me like it would clearly fit into the GI bill.

Mr. TAYLOR. Okay.

Admiral WHITEHEAD. We will get back to you on that, sir.

Mr. TAYLOR. Thank you.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you.

Mr. Gilchrest.

Mr. GILCREST. Thank you, Mr. Chairman.

Just a quick comment on high schools. I think, Mr. Connaughton, you said that you might focus on Mr. Cummings' high schools for high school maritime. If you could come over to the eastern shore of Maryland, maybe we could double up on that.

In the course of my district work, we have college seminars for students twice a year, and we always make sure that we have a representative from the Merchant Marine Academy at those seminars. I think what we ought to do in addition to that—maybe, Elijah, you and I can work on this—is have school officials in one of those seminars to show what opportunities there are out there in the maritime industry, something that we don't really place a lot of emphasis on. But there is, I think, a valuable reason for doing that because there are many students, I just know, that this doesn't fall within their frame of reference. If they had the opportunity, they were exposed to it, they would take advantage of it, which leads to the next question.

If we can't now expand, for example, the Merchant Marine Academy that we have or the six other State academies that we have, and we want more high schools to expose students to this type of opportunity, that means we really need to find a way to start expanding those college facilities so that they can take advantage of these opportunities.

I guess, Mr. Connaughton, how many graduates from the Merchant Marine Academy do you know stay in a career in the maritime industry? Is there a percentage we could look at?

Mr. CONNAUGHTON. We can give you some of those numbers, sir. I don't have them with me. I can tell you, again, from my anecdotal information, that the vast majority do stay in.

Mr. GILCREST. I see.

Mr. CONNAUGHTON. They may go ashore and assume management positions, but, for the most part, I think that almost all stay in some sort of maritime-related field.

Mr. GILCREST. The other thing, it is my understanding—although I don't know this, I am not on the Armed Services Committee; maybe Gene Taylor can tell me—if you are a graduate of West Point or the Naval Academy or the Air Force Academy, it is my understanding that the military will send you to graduate school or post-graduate school. You can get a PhD while you are in the military. When you graduate the Merchant Marine Academy and you want to get a further degree, a Master's or a PhD, does the maritime industry, in some capacity, pay for that degree?

Mr. CONNAUGHTON. Well, it is not necessarily the advanced degree, sir, as much as it is maybe the advanced license. I think what the normal career path would be, starting out as a Third Mate or Third Assistant, then moving up to Second, First, and then Master

or a Chief Engineer. I think the challenge that everyone is facing today is that it has become very, very difficult for mariners to work their way up the what we used to call hawsepipe, license-to-license. And also for those mariners who are sailing, if they are not a member of a labor organization with a training school or they do not have an employer to pay for these courses that are required due to regulatory——

Mr. GILCHREST. So if you are a graduate of the maritime industry or one of these State schools, to move up the ladder, for example, is vastly different than it would be to move up the ladder in the Coast Guard or the Navy.

Mr. CONNAUGHTON. Yes, sir, that is correct.

Mr. GILCHREST. This isn't the same sort of structure. Is there any way we could take a look at that structure and begin the process of examining it to change it?

Mr. CONNAUGHTON. Well, you know, it is one of these issues, sir, where there are regulatory standards that deal with the licensing and then there are the educational standards. And every one of these graduates from Kings Point and those who have the obligation from the State schools, they end up having their commission in the military, in the Reserve; they have their degree and they have their license; and if you sort of look at them, all three have different sorts of career paths and different sorts of requirements.

Mr. GILCHREST. If you look at the number of graduates in the maritime industry today, the State schools or Merchant Marine Academy, how short are they of meeting demand?

Mr. CONNAUGHTON. It is difficult to actually put a number on it. I can tell you that my conversations with particularly the State presidents, that they have never seen applications like they have seen today, the numbers of people trying to get into their, in particular, licensed programs. And when you look, anecdotally, at the number of employers coming to the career days, trying to attract soon to be new graduates, they are seeing record numbers of companies coming and seeking graduates, and many graduates having multiple job offers. I mean, again, we are going to try to get a handle on some of the real numbers, but we have never seen a job market this good, or at least have not seen a job market this good in a very long time.

Mr. GILCHREST. That is great. Thank you very much.

Mr. TAYLOR. Mr. Gilchrest, would you yield for one minute?

Mr. GILCHREST. I think I have five minutes left.

Do I have five minutes left, Elijah?

Mr. CUMMINGS. Yes.

Mr. TAYLOR. Thank you, Mr. Chairman.

Thank you, Mr. Gilchrest.

Secretary, I am just curious. Is anyone tracking—I am sort of familiar with the offshore supply vessel business and the boom and bust with it, so I am curious, is anyone tracking the boom in the offshore supply vessel business to what extent that is affecting the shortages that are going on right now; and, again, it has been very cyclical. If there is a bust, there is the boom in hiring for the young people coming out of the Merchant Marine Academy, coming out of S.U.N.Y. Does that continue or do we get back to a situation where

we were a few years ago, where we are looking for places for these young people to serve?

Mr. CONNAUGHTON. Sir, I think, at \$88 a barrel for oil, the boom is here. They are going further and further out in the exploration for oil. What we are seeing—again, it is anecdotal conversations with OMSA, the offshore industry, as well as actual individual operators that they are having a very difficult time finding people. They are offering incredible salaries, and as long as oil stays at the price it is, which, given the growth in the economies in China and India, as well as the rest of the Far East, we think the boom times are going to be here for quite some time, sir. And the salaries and the size of the vessels and the complexity of the vessels that are in the offshore industry is like something we have never seen before; they really are ships. And for the foreseeable future, as long as those economies worldwide continue to grow, we think the boom time for the offshore industry is going to be there and stay here.

Mr. TAYLOR. But does that contribute 20 percent of the demand, is it 10 percent of the demand, is it half the demand? That is what I am trying to get in my mind.

Mr. CONNAUGHTON. I don't know, sir. I actually have numbers, aggregate numbers for employment. Again, when I said it was about 85 percent right now, just a few months after graduation at sea or in the military, we can go back and try to break those numbers down and see actually where people are working.

Given that, actually, right now, in the United States, on the deepwater side, we do have a sufficient number of mariners, I think when we go back and break these numbers down and get them back to you, we are going to see that the vast majority of the demand for these graduates is offshore as well as inland.

Mr. CUMMINGS. Mr. Larsen.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. LARSEN. I am waiting for that clock to reset to get my five minutes. Thank you, Mr. Chairman.

Admiral Whitehead, something specific to Washington State. We are obviously looking at, on the Committee, lifestyle issues, wage levels, requirements, and so on. I know that the Coast Guard is working with the State ferry system to implement some regulations on crew endurance and fatigue, and these regulations, specifically the requirement that a mariner work no more than 12 hours in a 24 hour period, don't always work with our State ferry schedule, which is not a tourist attraction, but State ferries are an important part of our commerce and transportation system.

I just wanted to get your impression. Is the Coast Guard able to be flexible enough with the regulations as they apply to different sectors of the maritime industry? Because this particular sector of the maritime industry is in fact particular largely to Washington State, the largest vehicle traffic on ferries, the largest passenger traffic on ferries of any ferry system in the Country.

Admiral WHITEHEAD. Yes, sir. I am generally familiar with your ferry system. I know it is a very large one and it plays a great role in your economy and, of course, in transportation. The crew endurance system, I am glad our people are working the your State officials on that as well, because it is a very important issue for us.

Right now, the laws, as I understand them, read basically that a mariner can't operate more than 12 hours continuously, except in an emergency situation. So I am not sure that we have the flexibility to make any changes in that right now, but I am quite sure the State ferry system is engaging with our maritime licensing people within the Thirteenth Coast Guard District.

Mr. LARSEN. I am sure they are. I know that they are, and I just hope that there is enough flexibility found to continue to make our ferry system work. It is not easy. Sometimes you just can't take an 8 foot skiff from San Juan Island to Anacortes to get back home after your shift is done, and that is a scheduling problem, obviously, but sometimes that is the way it works when you have the ferry system you have.

Admiral WHITEHEAD. Yes, sir. I should also say that if they are on a two-watch schedule, which I believe they are there, there is flexibility within the company itself or the State to adjust those hours in some way. Many companies—and I am not sure about your ferry system—are operating on a square six system, where they are doing six hours off and six hours on, and there is some flexibility there, providing they don't exceed the 12 hours.

Mr. LARSEN. Okay. I just wanted to highlight that.

The second is for you as well. In your testimony, you talk about future improvements that will benefit merchant mariners, and the four bullet points read more like a list of goals as opposed to specifics, so I was wondering if you could walk through a couple of specifics. One is expediting the regulatory implementation for training and recruitment, and second is improving the mariner credentialing through greater efficiency, transparency, and capacity, and continuing to improve processes. It sounds a little more goal-oriented than specific actions. If you can walk through the actions for us.

Admiral WHITEHEAD. Yes, sir. I have to tell you I came to the Eighth Coast Guard District about a year ago. I was very dismayed at the delays that we were seeing at our regional examination centers in New Orleans and Houston. We took some immediate actions for improvement and now—and I have to tell you I was a bit skeptical with the future implementation or standing up of the National Maritime Center. My offices have been working very closely with the NMC to see exactly what they are doing, and I had an opportunity about a month ago to come up and visit the in West Virginia. And I have to tell you I will certainly not tell you today that we have turned the corner on licensing and credentials, some of the delays that we have had, but I think the corner is in sight. I am very, very heartened by the improvements that we are making and that the NMC is making. There is a variety of things that we are trying to do at the NMC and the numbers are actually showing up as improvements. So there is activity that is showing some real improvements.

But what we are trying to do at the National Maritime Center is, first off, to decrease the processing time that is involved in getting a mariner his credential, whether it is a license or a merchant mariner's document, from the time he submits it. Before, we had 17 regional examination centers that probably each had their own process for how they would handle a license or an MMD applica-

tion. Now we will be going to a system where we have just one location and one process to manage. So I think that will give us some clear improvements there.

We are trying to also improve consistency of service by having centralized evaluators in one place. That will, I think, also help us.

And then, finally, we are improving things with customer service, which was an area that was sorely in need of some improvement. We have established a new toll-free call center, where a mariner can call up this 888 number toll free, they can get an application sent to them. Once their application is submitted, they can actually monitor the progress of their license online, and they can track it and see it, and they can talk to a human being and find out exactly where their license application is in the system.

And I mentioned to you that we are getting results. Just in the period of time since the NMC has stood up, a matter of months, they have reduced the inventory of applications that were awaiting processing by 39 percent. In addition, the average license renewal has decreased by about 25 percent in the time it takes to get out since June.

I have to tell you that one of the other major things that is an improvement, I think, in the Eighth Coast Guard District, particularly at New Orleans, but also Memphis and Houston, one of the problems we had was our applications were coming in at a rate of about 60 percent to 80 percent errors. So the applications were not complete when they were turned in. This put a little bit of a hardship on the mariner in the sense that he or she might be going to sea, and they would mail in their application and there was maybe a block that needed to be filled in or some document that wasn't here, and then they are gone for maybe several months, potentially, and then they come back and get the thing, then they mail it off again; and it was this back and forth. So it was a real problem.

We are now going to assist them where, in the Eighth District, we have created a CD wizard application, so you can plug the CD in, and if you forget to fill in something, it will highlight it in red, just as you would see if you ordered something on line and you forgot to put your telephone number in it. So we are going to that and the NMC is now seeking additional funding to be able to improve their licensing documentation computer system to give them greater flexibility and speed up their process time as well.

So I think we are really seeing some very, very important changes, and with that comes additional people, additional people that have not been there in the past that will be able to, I think, handle the capacity much better. I am very optimistic.

Mr. LARSEN. Thank you.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much.

I ask unanimous consent that Mr. Boustany may sit with the Subcommittee and participate in this hearing. Without objection, so ordered.

Mr. Boustany, do you have questions?

Mr. BOUSTANY. Thank you, Mr. Chairman. Having just come in, I don't have any specific questions at this time. I just want to say that workforce issues in the maritime industry, in my home State

of Louisiana, we have reached a crisis stage. I represent coastal Louisiana, two of the parishes in coastal Louisiana. I have visited a number of our facilities, and this is something that is urgent. It is a complex problem and I hopeful that we can start looking toward solutions as we go forward.

I want to thank the Subcommittee Chairman for holding this hearing and for allowing me to sit in.

Mr. CUMMINGS. Thank you very much.

Ms. Richardson.

Ms. RICHARDSON. Thank you, Mr. Chairman. Just three quick questions.

In the information provided, you talk about a list of individual companies that provided partnership programs. Could you please provide this Committee the contact information and the location of those individual companies?

Mr. CONNAUGHTON. Yes, ma'am, we will provide those to you.

Ms. RICHARDSON. My second question is it also is noted in the information that the Seafarers International Union in Maryland has a pretty extensive apprenticeship program. Could you also provide to this Committee for the other locations where the Seafarers are located? For example, for me in California, do they have a similar program? And, if not, what we could do to make that happen?

And, number three, you also noted in the information that there are 250 training providers. If we could also receive that information of contacts and locations.

Mr. CONNAUGHTON. Sure, ma'am. We will get you all of those.

Ms. RICHARDSON. Thank you very much.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Thank you very much, Ms. Richardson.

Let me just ask. I want to go back to you, Admiral Whitehead. In the next panel there is going to be some discussion by Mr. Michael Rodriguez, Assistant to the President of Masters, Mates, and Pilots Union, about the way mariners are treated, and, as you know, the conduct of the Coast Guard's ALJ system has been, and continues to be, of great concern to the entire Subcommittee. One witness write in testimony that the Coast Guard is unwilling to fully inform mariners of the nature of an investigation and their rights during an investigation. Also, the testimony suggests that the information given by the mariner in an accident investigation could be used to prosecute the mariner. Is this common practice? The Coast Guard has been required to cite the Miranda rights to a mariner when their statements may be used against them.

And so that you understand the relevance, in Mr. Rodriguez's testimony, what he is saying is that because of the way mariners are treated, it is his belief that that may deter them from wanting to become mariners. In other words, they don't want to suddenly become criminals when they are trying to pursue their life pursuits, and they feel, quite often, that they have been treated unfairly.

Now, this doesn't just come from Mr. Rodriguez. As you know, we have had an extensive hearing on ALJ and there has been no subject that this Subcommittee has addressed that has drawn more interest than the fairness of hearings and the ALJ process. So would you comment on that for me, please?

Admiral WHITEHEAD. Yes, sir. As I understand it, there are about 5,600 cases a year that are brought from the Coast Guard that could potentially result in an administrative hearing, and of those, most of those are handled, let's say, in-house by the Coast Guard, so that there are only around 1,100 that even make its way up to the ALJs. And then, at that point, most are handled in some way that don't result actually in a hearing, so that there are only a couple hundred hearings a year.

With respect to the potential prosecutions, there are some laws that are old on the books and some newer ones that certainly require the prosecution of mariners if there is a criminal violation, and cases that come to my mind are cases involving environmental crimes. Should a case like that come up, I am quite sure that the Coast Guard ourselves would not prosecute an individual criminally; that would go to the local U.S. attorney, and at that point we would turn it over to the U.S. attorney. And whether the U.S. attorney could handle those types of cases, it is a selective sort of thing based on their workload, I believe.

Mr. CUMMINGS. But you didn't address my question. And I realize that you may not have been prepared for that, but I would really like for you to look into that issue, and I will put it in writing, the issue of Miranda rights and a lot of times mariners feeling that they have been placed in a position where they are damned if they do and damned if they don't, and they think they are trying to work out issues and it is like a "gotcha" kind of situation, as opposed to a situation where there is some leeway, where it could be worked out; the next thing you know, they are hauled before an ALJ hearing and have not been even given the Miranda rights.

As you know, we are looking seriously and, by the way, in a bipartisan way, in removing the ALJ from under the Coast Guard. We are just looking at trying to figure out the best way to do it. But, in the meantime, we just want to make sure that mariners are treated fairly and that we are not causing folks not to come into this profession because of the belief that they might be treated that way.

Admiral WHITEHEAD. Yes, sir. I would be glad to get back to you on the record with that, sir, but I should say that unless things have changed, I used to be an investigator myself, many years ago, and if there were some belief that there was a criminal violation involved, I am quite sure our Coast Guard investigator would give the appropriate warnings.

Mr. CUMMINGS. All right. And the other thing that we will do is we are going to make sure that you get a copy of the relevant testimony so that you can—sometimes I think we sort of talk passed each other—so that you will know what the people who are subject to the Coast Guard are feeling and saying. Okay?

Admiral WHITEHEAD. I would be happy to do that, sir.

Mr. CUMMINGS. Thank you very much, both of you. We really appreciate it. Thank you.

If our next panel would come forth now, please.

Mr. Michael Rodriguez is the Assistant to the President of the Masters, Mates, and Pilots Union; Mr. Carl Annessa, President for Operations, Hornbeck Offshore Services; Ms. Cathy Hammond, Chief Executive Officer for Inland Marine Services with the Amer-

ican Waterways Operators; Admiral John Craine, the President of Maritime College of New York; Captain William Beacom, Navigation Consultant and Professional Mariner; and Mr. Augustin Tellez, Executive Vice President of Seafarers International Union.

First of all, thank you all for being with us. It is my understanding that we are going to have a vote in about 10 minutes. We have got six witnesses, so let's try to adhere, as close we can, to the five minute rule. Thank you. And if you want to take less, you are welcome.

[Laughter.]

TESTIMONY OF MICHAEL RODRIGUEZ, EXECUTIVE ASSISTANT TO THE PRESIDENT, MASTERS, MATES AND PILOTS; CARL ANNESSA, COO/VICE PRESIDENT FOR OPERATIONS, HORNBECK OFFSHORE SERVICES FOR OFFSHORE MARINE SERVICE ASSOCIATION; CATHY HAMMOND, CEO, INLAND MARINE SERVICE FOR AMERICAN WATERWAY OPERATORS; ADMIRAL JOHN CRAINE, JR. USN, RETIRED, PRESIDENT, S.U.N.Y. MARITIME COLLEGE; CAPTAIN WILLIAM BEACOM, NAVIGATION CONSULTANT, PROFESSIONAL MARINER; AUGUSTIN TELLEZ, EXECUTIVE VICE PRESIDENT, SEAFARERS INTERNATIONAL UNION

Mr. RODRIGUEZ. Thank you, Mr. Chairman. I will go through this as quickly as possible, in the interest of time.

Good morning, Mr. Chairman and Members of the Subcommittee. I am Michael Rodriguez, Executive Assistant to the President of the International Organization of Masters, Mates, and Pilots. I began my career in the maritime industry as a graduate of the United States Merchant Marine Academy in 1979. I sailed as a deck officer aboard U.S. flagged vessels until 1995. I am an officer of the Naval Reserve and a veteran of Operation Enduring Freedom. Thank you for inviting me to appear today.

America's mariners are an important national asset, an asset that our Nation cannot afford to lose. Mariners have served our armed forces; they are supporting our troops in the Middle East. As Naval officers, mariners have performed on active duty at sea, ashore, and as harbor pilots. American mariners play a role in relief and humanitarian efforts. Following the attack on the World Trade Center, mariners rapidly mobilized to evacuate thousands from lower Manhattan. In 2005, they helped provide relief to the victims of the Gulf hurricanes and the tsunami.

A strong commercial fleet provides good paying jobs and is an essential part of maintaining these capabilities and attracting young people to our industry. To this purpose, there are three fundamental elements of maritime policy that Congress and the Administration must continue to support. First, the Maritime Security Program is crucial toward maintaining a U.S. flagged fleet and an American presence in world shipping markets and opportunity for mariners; second, the Jones Act is central to our economic security and an important source of jobs; and, third, our cargo preference laws must be fully enforced. They provide an important incentive for shipowners to keep their ships under the American flag.

Mariners face many challenges: they endure long separations from home, extreme working environments, and the dangers of the

sea. They have always accepted these difficulties, but there are aspects of their work that governments and industry can manage.

Criminalization of the unintentional acts of mariners following accidents is a human rights issue as well as a recruiting and retention issue. The maritime community recognizes that mariners, subject to the laws of many jurisdictions, must have special legal protections under uniform international standards. Regrettably, the United States opposes the international community's work on this issue.

Mariners live where they work. They often sleep only a few feet away from engine rooms, cargo spaces, and machinery. Quality rest is essential for a safe workplace, stress relief, and overall health. A recent survey reported that one in four mariners said they had fallen asleep on watch. Nearly 50 percent of mariners reported work weeks of 85 hours or longer. Almost 50 percent of mariners believe their working hours are a danger to their personal safety. In the short term, stress and fatigue cause accidents. In the long-term, the effects are poor health and reduced life expectancy.

Maritime security regulations have not only increased the workload on our mariners, they have cut off mariners' ties with the shore. Unfortunately, in many ports around the United States, mariners, labor representatives, visitors, and welfare service providers are denied access under the pretense of maritime security. The right to shore leave is a part of the International Ship and Port Facility Code, which is a treaty obligation of the United States. However, this important human right is often ignored.

The Members of this Subcommittee are well aware of the problems with the TWIC program. There are two issues that most directly affect the maritime workforce. First, the program goes well beyond what Congress originally intended and it unnecessarily burdens mariners. For instance, mariners or prospective mariners who have committed one of the disqualifying crimes will be denied a TWIC until they prove that they are not a terrorism threat. Many of these individuals will leave the industry rather than endure this bureaucratic exercise. Second, a TWIC will not guarantee access for mariners to shore leave because the TWIC, a Federal security program, does not preempt State, local, or facility access control measures.

Mr. Chairman, the United States must stop treating mariners like criminals and begin to treat them like the national asset that they are. They are dedicated professionals performing services essential to our Nation's economic and national security. If we can manage and develop this national asset appropriately, we have a chance to compete for the best and brightest of our young people.

This concludes my remarks, Mr. Chairman. I would be happy to answer your questions.

Mr. CUMMINGS. Mr. Annessa?

Mr. ANNESSA. Thank you for allowing me to testify on this subject this morning. My name is Carl Annessa. I am the Executive Vice President and Chief Operating Officer of Hornbeck Offshore Services, a publicly traded company which owns and operates vessels that support the offshore and the gas industry. Today, I am testifying on behalf of the Offshore Marine Service Association. OMSA's member companies are the lifeline to America's offshore

energy resources, providing the U.S. flagged vessels that move all of the equipment and most of the workers needed to find and produce our Nation's offshore oil and gas resources.

The topic of this hearing is important and timely: the offshore work boat sectors and the process of replacing and upgrading our fleet, building an estimated 150 offshore service vessels over the next five years. A recent OMSA survey indicates that our members will need about 3600 mariners to crew these new state-of-the-art vessels. Given the time that it takes for a mariner to work his or her way up to becoming a licensed captain or a licensed engineer, building our workforce is as important an industry priority as is building our new vessels.

Our industry is concerned about the licensing process. The burdens that the International Standards for Training, Certification, and Watchkeeping Code have placed on our mariners are challenging. The STCW, which sets worldwide standards for mariners, was developed for large ships on ocean voyages. However, more than 90 percent of the U.S. flagged vessels that fall under the requirements of the STCW are smaller coastal and offshore boats. Increasingly, the Coast Guard's interpretation of STCW's mandates are out of synch with the needs of the vast majority of American mariners who fall under STCW.

The Coast Guard does deserve credit, however, for its efforts to revamp its licensing and documentation system, and to cut down somewhat on the delays wrought by the implementation of STCW. From every indication, and some of those that you heard a minute ago from Admiral Whitehead, those reforms are beginning to take hold and beginning to improve the results of the licensing process that our employees face. However, the licensing process was developed for another age, when mariners had different and less complex needs. The current reforms may only improve the efficiency of an antiquated system. The Coast Guard needs to continue to strive for the modernization of the entire process to meet the needs of mariners today. If that takes additional resources, we would certainly encourage Congress to fund it.

Another challenge that we face, again, as you have heard, is the aging of our workforce. A recent OMSA survey of member companies has determined that nearly half of our licensed officers are over the age of 50. That means, in five or ten years, our most experienced captains and engineers will be approaching retirement. Since it may take at least that many years for a mariner to rise to a senior position of responsibility in one of our vessels, we can't afford to waste any time in addressing that future and impending shortfall.

The Coast Guard is currently working on new fitness-for-duty standards. We need to make sure that, as these medical standards are implemented, that they make sense and don't inadvertently cut productive careers short. Mariner wellness programs will become more and more important to our industry and the marine community at large. Congress should consider funding a program that helps promote wellness in the maritime industry. OMSA would welcome the chance to participate in a pilot project toward that end.

The foregoing standard industry has a true strength: in the off-shore work boat industry, we can offer Americans the opportunity to earn a very good living at a skilled profession. We can take young men and women and give them a clear career ladder that will move them from positions of entry level, unskilled laborers to senior positions as licensed masters and licensed engineers of multi-million dollar vessels. We will provide the training the mariner needs to advance to a job that could pay a six figure salary. We also offer a very safe workplace, one that is statistically safer than most any other workplace in America, according to OMSA data.

The nature of the work can be hard and stressful, but I think our industry does offer something that is a fundamental American value, and that is opportunity. Individuals who come to work in our industry know, the day they first walk aboard one of our vessels, that their ability to succeed depends on their skill, their energy, and their willingness to work hard. We think that is a very American concept and worth celebrating and defending. Ultimately, we believe that that value will be the source of our success as an industry.

We certainly welcome the role of the United States Coast Guard as a partner in our efforts to streamline mariner education, licensing, and career development, but insist that they will so continue in that function, that they be adequately motivated, staffed, and funded for their role in that process.

Thank you very much, and I look forward to your questions.

Mr. CUMMINGS. Thank you very much.

Ms. Hammond.

Ms. HAMMOND. Good morning. I am Cathy Hammond, CEO of Inland Marine Service in Hebron, Kentucky. We are a privately held company in the marine business since 1981. Unlike many companies in our industry, Inland Marine Service does not own towboats or barges. We provide the personnel to operate inland towboats for our client companies. We recruit, train, and dispatch the crew members for 19 boats operating on the Mississippi and Ohio River systems.

I am testifying this morning on behalf of the American Waterways Operators. AWO is a national trade association for the tugboat, towboat, and barge industry, an industry that provides family wage jobs for more than 30,000 mariners in the brown-and blue-water trade.

I love this industry, I believe in it, and I am proud of it. The towing industry provides great opportunities for young people looking to start a career or other Americans looking to make a career change. A college degree is not required. A young person can begin earning a living wage right away, and six figure incomes are achievable for those motivated to become pilots, mates, and captains.

Despite the opportunities our industry offers, a career on the water is not for everyone. Today, the towing industry faces a critical shortage of vessel personnel. This is a problem at two levels: first, attracting new people to the industry and convincing them to make their career on the water; and, second, replacing retiring captains and replenishing critical wheel house positions.

My written testimony describes in some detail the reasons for this situation. For now, let me simply say that there are no silver bullets that will solve the industry's personnel shortage and ensure the necessary supply of well qualified, well trained mariners to crew our vessels and meet our Nation's current and future transportation needs. Our industry recognizes that companies themselves bear the primary responsibility for making our industry as attractive as possible to current and prospective employees, and being creative in our recruitment and retention programs. We are working hard to do just that.

We also believe that there is a role for Congress and the Federal agencies to play. The place to start is by eliminating government-imposed obstacles that make the job of attracting and retaining qualified crew members more difficult. We offer the following recommendations. First, government policies and regulations such as the TWIC program that established barriers for new hires should be modified. We urgently request your support for including a practical interim work authority provision for new hires in the manager's amendment to the Coast Guard authorization bill.

Second, the Coast Guard should carefully review its protocols for interacting with vessel personnel and ensure that a stated objective of honoring the mariner is reflected in its dealings with the professionals who crew our boats. Routine interaction with vessel personnel should not be conducted in the same manner as a for-cause law enforcement boarding.

Third, the Coast Guard should make changes to its licensing system that eliminates obstacles to advancement while ensuring high standards of safety. Congress should monitor the Coast Guard's ongoing effort to restructure and centralize the licensing program, and ensure that this much needed effort truly achieves its intended goals.

Fourth, the Maritime Administration should recognize the changes in the domestic merchant marine and ensure that its publications reflect the fact that the majority of the onboard jobs today are on so-called small boats or small vessels such as towboats and tugboats.

Fifth, Congress and the Maritime Administration should ensure that the U.S. Merchant Marine Academy modernizes its focus to reflect the domestic fleet today and help prepare graduates for jobs in the towing industry.

Finally, we believe MARAD can also play a role in helping companies and mariners understand and tap into existing government resources or public-private partnerships for training and education.

Mr. Chairman, the personnel shortage is a complex problem and there are no simple solutions. However, if government can take these items as a work list and industry redoubles its efforts to improve crew member recruiting and retention, together we can make a meaningful difference in tackling this important and growing problem. Thank you very much.

Mr. CUMMINGS. Thank you very much.

Admiral Craine.

Admiral CRAINE. Mr. Chairman, distinguished Members of this Subcommittee, thank you for the opportunity to testify today. While I am with the State University of New York Maritime Col-

lege, I am here to represent all of the State maritime academies. And if I can convey only one message to you today, it is this: the State maritime academies—from Maine, Massachusetts, New York, Texas, California, Great Lakes in Michigan—produce the vast majority of all new licensed officers in the United States each year. These colleges are an extraordinary value to our Nation, but they need more government support to meet the growing demand for merchant officers who play such a critical role in our national security.

Last year, these State academies produced 70 percent of all new licensed officers. This is up from 51 percent just four years ago, and we expect this upward trend to continue. There is tremendous demand, as we have already heard, for licensed officers. Many Federal agencies compete for our graduates along with the growing need and demand from the commercial industry. Former Commander of the Military Sealift Command, Admiral Brewer, stated that our national military sealift requirements cannot be met without these graduates.

The State maritime academies operate under what is essentially a Federal mandate and are accountable to Congress, the Maritime Administration, the Coast Guard, and the International Maritime Organization for the education and training of our licensed students. Yet, only 3 percent of our annual funding comes from the Federal Government. The annual Federal contribution to the State academies has ranged from \$10 million to \$13 million a year for all six State academies combined. The amount provided today is less than it was 15 years ago in real dollars, a 25 percent decrease, while inflation for higher education has gone up by 70 percent.

One of our most valuable assets is our federally provided training ships. These vessels provide invaluable, real-world, hands-on training to our students. The ships are generally older, former Naval or cargo vessels that need to be converted for school ship use. A ship assigned to Texas Maritime is not deployable as a training ship due to lack of Federal funds to convert it for school use. Three other ships, while usable, are still awaiting additional Federal dollars to complete their conversions. The oldest of these six ships is 46 years old and will soon need to be replaced. These ships are used by the Federal Government for other global and national emergencies. Half of them were activated by the President for humanitarian use following Hurricanes Katrina and Rita. These ships should be considered national assets and funded accordingly.

Recruiting initiatives play a critical and crucial role in attracting young men and women into a maritime career. We ask a great deal of our students, who take in excess of 160 semester credit hours in order to graduate, versus a norm of 120 to 130 for other college students, largely because of the merchant marine license courses that are required by the Federal Government to graduate. They also spend in excess of six months at sea during their summer and winter breaks.

The State maritime academies offer in-State tuition or a reduced regional tuition to students from other States, to all other States, as an incentive to attract more prospective students. We are also working not only with high schools, but with elementary schools to get young students interested in a maritime career. The Federal

Government also has a student incentive program that provides funds directly to students to offset the cost of uniforms, books, and subsistence in return for a service obligation in the merchant marine reserve. Unfortunately, payments in this program have not kept up with inflation and it is not the incentive that it used to be.

Mr. Chairman, we will continue to carry out our mission of recruiting—which is our toughest job—educating, and placing the world's best trained, licensed mariners, but we need more Federal support in order to meet the growing demand for licensed merchant officers, for our training ships, our license programs, and the student incentive program. A stronger partnership with the Federal Government will better enable us to serve the needs of our Nation and our world.

Mr. Chairman, I thank you for this opportunity and I look forward to any questions this Subcommittee might have.

Mr. CUMMINGS. Thank you very much to the panel and our guests. It is my plan to—we have three votes, one fifteen and two fives, and so five minutes. So what I plan to do is reconvene at 12:30. But I would like to get the testimony of our two witnesses in. We have exactly 11 minutes and 27 seconds.

Captain Beacom.

Captain BEACOM. My name is Captain Bill Beacom, and I appreciate the opportunity to appear before the Committee. I am a lifetime mariner, second generation. I was on boats by the time I was five years old. I got my first look at a wheelhouse all by myself when I was 17 and became a licensed mariner when I was 20. I am currently in my eleventh issue. I have run all of the rivers that the Admiral mentioned before and dozens more.

The problem that we face with the industry is that people like me can't come up with a viable reason or a logical reason why anybody should join the industry, and we are the recruiters. What we find ourselves doing is trying to convince somebody that has got a certain amount of logic into joining something that is illogical. The pay looks really good on paper, but when you get on the vessels, you find that they can work you up to 14 hours a day the whole time you are on there, without any intervention by any regulatory agency or anything else. In a 30-day period, you can actually put in 10 42-hour weeks, and it isn't conducive to that.

Now, you know, we always figure that we should have to take our hard knocks, you know, pay our dues, but paying our dues just doesn't get us anywhere because, when you become a pilot, you would think that you wouldn't have to work over 12 hours out of a 24-hour period because that is what the law says. But the law was in place long before we had 9/11, and since 9/11—even though before that we already had watch change conferences, which takes about an hour a day, when the two people have to be in the wheelhouse at the same time. And, by the way, any kind of a management system that requires both the pilot and the captain to be working at the same time breaks the law, just by the zero sum. If you get 24 hours and you have got to split it up into watches, and nobody can work any more than 12 hours, any time both are required to be on watch at the same time, you break the law. So the watch change conference, by the letter of law, breaks it.

Now we come along with our responsible carrier program, and the captains and the pilots were pretty well in a position that they couldn't argue with it, but they had to enforce it, and that takes time besides navigation time. Then 9/11 came along and the captain became the vessel security officer. Now, in the Federal Register it said it probably wouldn't take over two and a half hours a day to fulfill the requirements of the vessel safety security officer, but the companies are very proud of the fact that it only takes about 40 minutes, but that 40 minutes is also outside the 12 hour law.

And then we have the responsibilities of the crew endurance management system, not counting all of the paperwork stuff that we have to do in between. So you don't graduate from a 14-hour day to a 12-hour day, you graduate from a 14-hour day to another 14-hour day. And two of those hours are outside of the law. But do you dare say anything? No. Because, if you do, then you are considered to be a rabble rouser and you will be looking for other employment; and that is exactly why the people in this industry are 50 or 55 years old, because that is the only thing they know how to do, and they are just tolerating this onerous load that you have put upon us, and they are just working until the end of it, and very few of them stay over.

Now, the wages are way up and it looks really good in the long-term, but a survey was done by John Sutton, the President of AIM, in 1998, in which he concluded that the average life expectancy of a towboat captain is 57 years and 8 months. And I brought that survey up to date, to 2004, and it stayed about the same; it might have even went down a little bit.

So there is really nothing that would attract a person to this industry. We are overloaded; they have cut the crews on the boats. Not only have they cut the crews, the turnover has made it to where less of the people in the crews have experience. Because there is only a small amount of the people in the crews that have experience, they are worked to death; and a 14-hour day sometimes becomes a relief, because if you have two or three people on the boat that don't have the experience, then you have to make up for it.

So what we really need is enforcement of the regulations that we have, and we need some new manning requirements.

Mr. CUMMINGS. You convinced me.

Mr. Tellez.

Mr. TELLEZ. Thank you, Mr. Chairman. Since I drew the short straw, I will try to be as quick as possible.

Thank you for the opportunity, and welcome, to Ms. Richardson, to our world.

I am Augustin Tellez, commonly known as Augie Tellez. I am the Executive Vice President of the Seafarers A&G District. Along with our affiliates, including the AMO, we are the largest representative of mariners employed throughout the entire spectrum in the maritime world.

Quick snapshots, since we are pressed for time.

Any discussion of manpower issues has to be taken in the context, first off, in national security. If you talk to a logistician, he will tell you the strategist plans the war, the tactician fights the

war, and the logistician wins the war, and the way he does that is by the successful movement and sustainment of movement of vast volumes of cargo and material and troops required to win the battle. The major engine fueling that successful effort is the United States merchant marine and the manpower pool required to staff it.

Besides the importance of the vessels themselves, more importantly, the U.S. commercial fleet, a viable and effective U.S. commercial fleet is a key component because it provides the employment base by which everything revolves.

The other part of that merchant marine effort is the organic fleet or the military ships, including MARAD's RRF vessels. One of the lessons learned during the first Gulf War was that the Nation could not depend on laid-up old vessels without crews to be activated in a short period of time and go to war. We learned that lesson very quickly. Besides mechanical failures, it taxed the manpower pool employed at that time.

In order to address those issues, we changed the way we did business and we came up with the RRF ROS program, which puts a cadre of crew members on all those laid-up vessels to not only maintain them and keep them ready, but also to provide a nucleus crew for any activation crew.

Having said that, the commercial fleet being so important, we would like to thank this Committee, this Congress for their support and their continued support for programs like the Maritime Security Program, Cargo Preference, and all the other programs and policies that keep that commercial fleet viable.

It is also amazing that, having talked about the importance of the RRF vessel, we are a little dismayed at the government's efforts, in order to realize some short-term financial savings, it is looking to reduce and eliminate entirely some of those RRF vessels and their crews, which exasperates the problem we are here talking about because it eliminates employment base and jobs.

In general, the Union is not experiencing the shortage, at least on the deep sea side that we are here talking about. Part of that is because of the viability of the commercial fleet. It is also because we meet the challenges of the manpower issues through the aforementioned school in Piney Point. It just celebrated its fortieth anniversary and in that time has graduated 22,000 apprentices, new recruits. It has also graduated 100,000 upgraders and issued to them 238,000 certificates, many of them Coast Guard certified and STCW certified.

In anticipation of the boom in the Gulf mentioned by Mr. Taylor, a few years ago we met with our contracted companies and came up and developed an inland license program in conjunction with our contracted companies. They support it, they sponsor it. That, augmented by an inland apprentice program, creates kind of a cradle-to-the-grave situation where we recruit people specifically for that industry, ultimate objective of getting their license.

In conclusion, let me just say the manpower issue, any manpower issue can be handled as long as you control and manage the pipeline efficiently. And as long as there are jobs, viable, effective jobs out there, you can manage any—meet any challenge or manpower issue.

Also, before closing, my one comment on TWIC. Everyone else made their comments on TWIC. I find it amazing that we are sitting here talking about TWIC and imposing more stringent regulations and background checks on the most regulated people already, American citizens, and the very vessels that Mr. Bishop was talking about are transporting LNG gas into our Country with who knows who on those ships.

Thank you for your time.

Mr. CUMMINGS. Thank you very much. We will see you all at 12:30.

[Recess.]

Mr. CUMMINGS. Thank you all very much.

Admiral Craine, can you briefly speak about the partnership that your college is establishing with the several maritime high schools? And can you indicate whether you believe ties between such high schools and the Nation's maritime colleges could be increased to create a seamless educational path to draw students from high schools to the maritime academies?

Admiral CRAINE. Yes, sir, I would be happy to do that. The short answer to your question is yes. We are reaching out to these high schools to see what we can do to make it not only easier for these students to be able to come to our schools, but to get these students interested. As I mentioned in my testimony, recruiting is tough to try and convince a young 17 or 18 year old that life at sea and the maritime industry is something for them.

One of the things that we're doing next Tuesday, I will be with Art Sulzer, Captain Sulzer, who will be testifying in the next panel, and his school that he represents in Philadelphia, the one that you mentioned—the Maritime Industries Academy in Baltimore—along with two others, on Tuesday to talk about what we can do to provide curriculum to their schools that will provide a broader overview of what the opportunities are, so that the students can actually get started before they come.

Mr. CUMMINGS. It seems like in other industries, there has been more of an effort to try to get to our kids at a young age, high school age. Why does it seem like we are a little behind with regard to this industry? Why do you think that is?

Admiral CRAINE. I don't know if we are behind or whether these ideas of partnering, it is just a new, it is a great idea that we need, perhaps we could have been doing before. But we have realized that we need to reach out to high schools. And it is not just the rising seniors or those that are graduating, but we have to start at a younger age.

When I was the chief of education and training for the Navy, when I was on active duty, we had a program called Starbase Atlantis, where we learned that it was at the fifth grade level, if we were going to attract youngsters to have an interest in the sciences and the math that we needed to get them at the fifth grade level. That was the knee in the curve, where you could get the biggest bang for the buck. And we are doing that on our campus and I know the others are as well. We have our oceanography, meteorology professors, science professors, working with elementary schools. Just two weeks ago we honored Eleanor Roosevelt In-

intermediate School from Washington Heights in Manhattan as one of those schools that has been working with us.

And there are others. It is not something that is new to us, but the formal relationship we are finding is very helpful. We worked an agreement last week with Valley Forge Military Academy to accept any student that was accepted to their junior college, they have a high school and then a junior college. Any student that was accepted to their junior college would automatically be accepted to ours. Every day we are looking for new opportunities to establish these partnerships. We are really excited about the one that we are going to be talking about next week. We have three students from the Harbor School in Manhattan. They are freshmen, but they seem to be doing well, and we want more of them.

Mr. CUMMINGS. That is wonderful.

Mr. RODRIGUEZ, can you describe the extent to which the criminalization of mariners, you think, is affecting the recruitment? When I talked to the Admiral a little earlier in the first panel, he didn't seem to think that, well, I kind of got the impression that he didn't think that it was as bad as you make it sound in your testimony. Could you comment on that, please?

Mr. RODRIGUEZ. Yes, Mr. Chairman. Let me begin my answer by pointing out, what I have here is a report that was done back in May of 2002. I remember this effort because I was part of it, it was a very broad-based effort at coming up with some of the answers to the questions we are asking today in this hearing. And one of them is, one of the aspects of life at sea that, if I can take a moment to describe, these are very high level people from industry, from labor, from the Coast Guard, from the Maritime Administration, we all got together. We started at Kings Point in the spring of 2001. We had a number of meetings, things, as I recall, got a little overcome by the events of September 2001.

But one of the aspects that this very broad-based group came up with, one of the problems that we had recruiting and retaining people into our industry, was criminalization. And that is in this report, and I would like to provide that for you.

Over the years that I have been involved in the maritime industry, there has been more and more regulation put upon us. Mariners can be prosecuted under a number of different Federal statutes for discharging oil into the water, these are mainly environmental protection laws. And I can tell you that the level of morale on board ships has been affected. If you can imagine, it is not just the person who is being investigated or prosecuted directly who is affected; you have this whole mindset of the crew, particularly amongst the officers, that every time they go up that gangway, they may be liable for something that happens.

So I hear about it. I worked at one time in the Merchant Marine Academy handling the training for a lot of the cadets who came through there. Some of the young graduates who had problems, they had an incident, would call me in my new job and say, I am thinking about getting out of the business: I got investigated. So it is affecting the morale of this industry. I would venture to say that it goes right from the inland people to the deep sea folks.

Mr. CUMMINGS. So we are looking into the ALJ situation and hopefully, that might be helpful in trying to address that issue.

I want to go to you, Captain Beacom. In your testimony, you raised some very serious concerns about safety in the towing industry. You believe that manning, in particular, is often insufficient in part because the Coast Guard does not have adequate resources to ensure safety in the industry and in part because you believe management is essentially filtering information that passes to the Coast Guard through safety committees. Can you comment on how prevalent unsafe conditions you have described are in the towing industry?

Captain BEACOM. Well, a lot of it is based on the fact that they have cut the size of the crews to the point where it is impossible to operate safely. In 1988, I worked on a vessel that had a 10 man crew. That vessel is currently operating with a six man crew, doing exactly the same thing, and there is no automation that would lead to that downsizing. So you either have to come to the conclusion that the people that were operating the vessel in 1988 were idiots and they were paying four people not to do anything, or you have to come to the conclusion that those six people are now doing the work of ten. And any time you put that kind of an onerous workload on people, you decrease the amount of safety.

Now, because of the fact that there is an onerous workload, the turnover changes. And I talked with people in both Dupont and Shell that say when you get more than a 20 percent turnover that any safety management program is nullified by the lack of knowledge within the group. And we have way more than a 20 percent turnover on the deck on most towboats. So if you had adequate manning, you would eliminate this. Not only would you eliminate it, you would level the playing field so those companies who bid jobs on the basis of inadequate manning would not have a financial advantage against those who are trying to do things right.

Mr. CUMMINGS. Thank you.

Mr. LaTourette.

Mr. LATOURETTE. Thank you, Mr. Chairman.

I apologize that other responsibilities didn't let me listen to your testimony, but I read it before.

Mr. Rodriguez, I want to pick up with where the Chairman was on the criminalization issue, because we did have a rather lengthy hearing on the administrative law judge process, and I came away convinced that the Chairman was on the right path. I am a big believer that people can accept results, even when they lose, as long as they think they have been treated fairly. You don't always win, but you have to be treated fairly.

If criminalization is one of the findings of this group that got together in 2001, what do you think the answer is? Clearly, we can't have people dumping oil in the water, we can't have people getting drunk and running their boats into rocks and things like that. So what would be your observation, that we should look more to civil penalties? What do you think we need to do?

Mr. RODRIGUEZ. Mr. LaTourette, I believe the answer, well, I don't want to confuse the ALJ issue and this issue of criminalization. We appreciate your looking at that problem. We are hopeful that you will come out with the right solution. Criminalization is, let me start by saying, anyone who willfully or intentionally discharges oil into the water is a criminal. That is clearly against our

environmental law, it is against the public good. It should not be protected.

But accidents do happen, and they happen in this high risk maritime industry. What we object to is under some of the environmental statutes, we have strict liability for what occurs, whether it is an accident or not. I think looking at the way those statutes are applied and the effect on this workforce, and again, it is not that it is always a direct effect. It gets into people's minds, it gets into the way they do business. They get overly protective, the crew begins to split between the junior officers and the senior officers who are probably going to be on the hook for anything that happens.

I think a step in the right direction, and it is in my testimony, one of my recommendations is that we separate the investigations for trying to get to the cause of an accident and possibly a criminal action later on, and insulate whatever we find out in an accident investigation from any criminal prosecution that may result.

Mr. LATOURETTE. Well, I think that is a good idea. We just had a big train derailment in my district, and two agencies came in, actually the EPA wandered in too, but we had the FRA come in, NTSB came in. NTSB is tasked with figuring out what happened. Then FRA is tasked with figuring out whether somebody should be held accountable for breaking the rules. Is that the model that you are sort of pitching to us?

Mr. RODRIGUEZ. Yes. The work that we do at IMO is kind of heading in that direction. There is a code of practice, it is a very long title and I haven't really committed it to memory. But there was a code of practice for the disparate treatment of seafarers after a maritime accident. And it has some principles in there. And one of the principles is that one of the goals of the investigation is to determine what the cause was and to prevent those kinds of accidents happening in the future.

If you don't have the criminal side and the accident investigation side separated, it is very difficult to get at that root cause.

Mr. LATOURETTE. I would think that is right, because if the person believes that they are going to be on the hook criminally, they are going to clam up. I mean, why would you want to cooperate and sort of incriminate yourself potentially or provide some information to somebody that could be used against your penal interests?

Mr. RODRIGUEZ. It can be self-defeating, and the international maritime community is beginning to realize that.

Mr. LATOURETTE. Okay, and is that included some place? I know you said this in your testimony, these recommendations you are talking about, are they written down some place? Could you send those to us?

Mr. RODRIGUEZ. I certainly will. If I need to clarify them, if I need to elaborate on them, I certainly will.

Mr. LATOURETTE. Thank you so much.

Thank you, Mr. Chairman.

Mr. CUMMINGS. Just two questions. Mr. Annessa, you talked about the maritime industry's ability to recruit individuals from areas that are not near the water and that might in fact face a lack of local employment opportunities. What percentage of the people

working for the member firms of the offshore marine service association live in areas that are not near the water and particularly in areas that are economically depressed? Can you give me some kind of ballpark figure?

Mr. ANNESSA. Yes, sir. I am not sure that without referring to our survey we could give you the exact componentry.

Mr. CUMMINGS. That is why I said ballpark.

Mr. ANNESSA. I would suggest probably 75 percent of the mariners are in the coastal regions, the balance in the inland areas. I know that our particular company's case, when we look at our national demography, we have literally employees that live nearly every State in the Union, though the preponderance are in the Gulf States, Texas, Louisiana, Mississippi, Alabama, and then we have a high concentration in the Northeast, New York, Maine, and then in the Hampton Roads area, around Virginia, and then Florida. That seems to be the predominant locations where our workforce, and if it is indicative of a cross-section of the rest of the Country in our industry, then it would be probably appropriate. Seventy-five percent in the coastal areas, 25 percent in the inland areas.

And one of the premises of our written testimony to attract mariners or candidates for employment in the marine industry in let's say inland or marginally employed areas would be to be more proactive in our communication of the opportunities that the industry affords potential prospects, particularly when a lot of the companies pay the transportation or provide a transportation allowance that allows the employee to cover the cost of moving back and forth to his assigned vessel from his home. It is a remarkable benefit in our industry that is available in very few others that I am aware of, with the possible exception of the airline industry where that travel is paid, or compensated to the employee to move from his location of domicile to his assigned vessel.

Mr. CUMMINGS. Do you worry about the future of these companies and their ability to get the employees they need? Does that concern you greatly?

Mr. ANNESSA. It does concern me, sir, but it is not a grave concern. Because I do believe that we are on a momentum here that will, I hope, mitigate some of the busts and booms that our particular industry has experienced in recent years. We talk anecdotally about \$80 per barrel oil as a motivator for continued investment by our particular client group in developing the offshore oil prospects in this Country. But our fleets are predominantly focused on an international capability, again, it is another great advantage that our industry affords, is that even if our vessels are not able to be employed in the U.S., those U.S.-flagged vessels can be employed in foreign locations and employ a certain complement of U.S. mariners. I think we are in a period at least for the foreseeable future of a prolonged opportunity for full employment. And with that momentum, I believe we will begin to attract new entrants into our business.

The opportunities for a very predictable career path and the ability for an individual to attain a very well-paying job if he applies him or herself to achieving the credentialing that is needed is a very powerful and attractive for the candidates.

Mr. CUMMINGS. Can you tell me how much Offshore Marine Service Association generally spends on training their employees, and particularly for unlicensed mariners seeking to move ahead in their careers?

Mr. ANNESSA. Yes, sir, approximately, unlicensed mariners from a greenfield start of what we would call an entry level employee that would be an ordinary seaman, we commit approximately \$3,000 to \$6,000 to take them through the STCW certification and get them proficient, for example, for the deck department to be a rating and performing part of a navigation watch, which is one of the certifications they require. Almost all of our member companies are bearing the cost of that themselves, reimbursing or paying for that training of those individual employees. The career path continues to move from that rating level to mate or in the case of the interim, to qualified man or chief engineer onto captain of the bridge. Commitment of training dollars over a six to ten year career path, which is necessary not only to accomplish the course work, but to achieve the sea time that is required, may result in a commitment by the companies of anywhere from \$10,000 to as much as \$40,000, depending on the standard of certification that is attained by the mariner.

Now, certainly, we, like many of the other shipping companies under the U.S. registry, do try to seek candidates from the maritime academies, the State schools and Kings Point. They come with basically a third mate or third engineer's certification that they have earned through participation in the academic environment and the sea time they have achieved through those academies. But we also have to develop those mariners ourselves internally through what we call commonly the hawespipe, fellow, men and women that come up through the ranks to achieve those same certifications, at a cost either to themselves or generally borne by the companies that is not very much different than what they would pay or what the cost of an academy education might cost.

Mr. CUMMINGS. Thank you all very much.

Mr. Tellez, nobody asked you a question, did you just need to say something? Go ahead and say it. We definitely want to hear you.

Mr. TELLEZ. I would invite you all to Piney Point so you can see first-hand what happens down there in terms of training and certification. Come on down.

Mr. CUMMINGS. I have been there, but I will come back.

Mr. TELLEZ. I would invite the rest of the Committee.

Mr. CUMMINGS. All right. Thank you very much.

Our third and final panel, and I want to thank everybody for waiting around, we really appreciate it, Captain Arthur Sulzer, a Board Member with the Maritime Academy High School in Philadelphia, Pennsylvania; Captain Jeff Slesinger, the Director of Safety and Training with Western Towboat Company; and Berit Eriksson, Former Executive Director of the Pacific Coast Maritime Consortium.

Mr. Sulzer.

**TESTIMONY OF CAPTAIN ARTHUR H. SULZER, USN (RETIRED),
BOARD MEMBER, MARITIME ACADEMY CHARTER HIGH
SCHOOL; CAPTAIN JEFF SLESINGER, WESTERN TOWBOAT
COMPANY, CHAIRPERSON, COMMITTEE ON STRATEGIC
PLANNING, PACIFIC MARINE TOWING INDUSTRY PARTNERS;
BERIT ERIKSSON, FORMER EXECUTIVE DIRECTOR, PACIFIC
COAST MARITIME CONSORTIUM**

Captain SULZER. Thank you, Mr. Chairman.

Mr. Chairman and distinguished Members, it is a great pleasure to appear before this Committee. I am Captain Art Sulzer, a second generation mariner whose father served as a merchant marine officer in World War II. I have been in this industry my whole life and I have witnessed first-hand the effects of America's decline as a shipbuilder and ship-operating Nation.

As one of the focuses of this hearing is shortness of mariners, I actually find that heartening that this may portend a change in our industry and some future growth.

I am going to principally discuss maritime education at the entry and crew level, where our greatest shortages appear. My paper, which you have, is five sections. I am going to skip and just cover the last three in an effort to save time.

Most people are familiar with mariner training such as the cabin boy serving tea on the Titanic, the powder monkeys serving cannon balls to gunners in movies such as Master and Commander. This is the impression many Americans have of maritime training, and they were right. It is a hands-on training, although it has changed quite a bit since those days.

Today's mariner needs to be highly trained, needs to be dedicated and motivated. This applies to all positions on board ships, not just the master. That is what I want to address.

Many of my colleagues today talked about current issues and problems. I would basically echo those: aging workforce, compensation issues, documentation, renewal problems. But the one area that was not talked about today that I want to focus on is our maritime heritage. This is not talked about very often. It is most overlooked, and unfortunately, the American public has largely forgotten that we are an island nation, dependent on waterborne commerce for most of our goods and services.

Now, traditionally, American mariners have come from the European nations and certain areas of Africa, Asia and the Pacific. For the most part, they were also largely immigrants. Policies in the 1990s and security requirements have cut off the source of mariners. I believe we need to create a new generation of mariners in this Country with a tradition of maritime seafaring. And I believe that the group will come from our under-served urban students in America's cities, which can use this program as an opportunity to escape poverty and to find their ways to good, meaningful careers. That is what I think the maritime high school movement is about.

Specifically in maritime education, I got involved in 2003 as a board member opening a charter school in Philadelphia. We opened with 125 students. As of this year, we now have 700 and we have a waiting list of over 300 students. We will graduate our first seniors this year.

Along with that, I was also completing my doctoral work at the University of Pennsylvania, and because of my involvement, I took the opportunity to start to conduct research on this growing movement. When I thought I had one school, lo and behold, I found there are over 16 in the Country and growing. My research specifically is entitled Maritime Tactile Education for Under-Served Urban Students in America: Sailing to Success. Presently there are 16 maritime middle and high schools around the Country that are about 350 to 400 students.

What I have done in working with these schools, I have grouped them into a couple of categories. The first thing is program style, how they conduct their training. There is the integrated method, vocational, apprentice and academic.

The other way that I group these schools is by program type; what type of outcome do they desire. We have general maritime studies, which is a broad program; industry-specific, such as fishing, marina, tug barge; company-specific, where a particular company takes an interest in a school looking for future employees, and lastly regional. I have given examples of some of these fine schools in my paper.

What I would like to talk about is how we can help these schools succeed. Now, to help them, you have to see some of the positive outcomes. This has been parent-student interest, the graduation rates are up, comportment and student behavior has increased as a result of the maritime programs, academic grades have come up, and graduation upon employment.

You have asked me to come, I hope that I have excited you. I have some suggestions for you on how you can help. These suggestions include promotion of conferences on maritime education, development of grant programs on maritime regional awareness, video materials, review of aid restrictions which impact apprentice programs, continuation of maritime vocational training, encourage Federal agencies to continue to work with the maritime schools and create and fund a national cooperative research program in marine transportation to serve as a conduit and a source for these efforts and increase public awareness.

I see a positive future in maritime education and I am encouraged by the results we have seen in our own school and I hope this will be a continuing trend. Thank you, gentlemen.

Mr. CUMMINGS. Thank you very much.

Captain Slesinger?

Captain SLESINGER. Good afternoon, Mr. Chairman. On behalf of the Washington State Skill Panel, I want to thank you for inviting us to speak about how we are currently dealing with the personnel crisis in the towing industry. I am Captain Jeff Slesinger, Chairperson of the Skill Panels Committee on Strategic Planning.

I am also a working tugboat captain and Director of Safety and Training for Western Towboat. Western Towboat is a family-owned tug and barge company located in Seattle. We, as well as other west coast tug and barge companies, provide a vital transportation link between ports on the west coast and Alaska. There are many communities in Alaska where the only means of transporting critical supplies is with a tug and barge. Our work is diverse and essential. We move 600 foot tank barges filled with petroleum prod-

ucts; we tow freight barges stacked with containers; we tow ocean-going barges carrying rail cars on deck. We do this year-round through Pacific storms and Alaskan winters.

I can tell you from my own personal experience that this work is challenging and very rewarding. But frankly, we have serious concerns about our ability to crew vessels today and in the future. We face challenges on all fronts: recruitment, training and retention of competent and qualified mariners.

The Skill Panel's success in meeting those challenges is a result of a highly-organized, non-partisan collaboration between business, education, labor and the local workforce and economic development councils. The one word I hope you associate with our success and our testimony today is partnership. We found solutions by partnering with government and industry resources. And we would like the Federal Government to play a larger role in that partnership.

Over the past two years, our skill panel has developed two highly effective and efficient partnership models that have a record of demonstrated success. The first is the Skill Panel itself. The catalyst for the panel's formation is the same fundamental personnel problem we share with the rest of the towing and marine transportation industry. We have good family wage jobs. We have people who want those jobs.

What we don't have is a clear, coordinated career path. We don't have good answers to the man or woman who is on a dock and asks, how can I get a job on one of those tugs? What kind of training do I need and where can I get it?

Although these are simple questions, the process of developing simple answers is more complex. This is because the source of these answers lies in different sectors. Industry, Government and educational institutions all house partial solutions. What is needed is an organization that connects these sectors, takes partial solutions and makes them whole. This is the primary role of our Washington State Skill Panel.

The second example of the successful approach is our support of the Workboat Mate Vocational Apprenticeship Program. In 2005, the Pacific Maritime Institute, located in Seattle, pioneered this approach for towing vessels. This program provides a defined career pathway to the level of mate.

At the end of the two year process, we have an individual who has confidence in his skills, because he has already put them to work in an on the job environment. The Coast Guard has confidence that this individual has met not just the certifying standard, but the intent of that standard. And the companies have confidence that this individual has been trained to a common, accepted standard, one that works in practice, not just on paper.

The program's success is a direct result of a partnership between an individual cadet, the Coast Guard, the towing industry and the maritime training center. All bring commitment to the process, and all reap the rewards.

The benefit of this program goes far beyond the original partners. The local communities have gained an individual whose family wage job contributes to the local and regional economies. He or she helps ensure that a critical link in the region's transportation net-

work continues to function in a safe and effective manner. This is truly an example of how a rising tide floats all boats.

This type of coordinated effort is readily available to other regions and could be expanded to all sea-going positions on tugs. However, funding for the Skill Panel will soon run out unless new Government resources are made available.

Mr. Chairman, we very much appreciate the opportunity to appear before you today. Our Skill Panel stands ready to work as a contributing partner with this Committee and other Federal agencies. Together, we can create clear, viable pathways for training qualified individuals seeking a career in the towing industry. Thank you.

Mr. CUMMINGS. Thank you very much, Captain.

Ms. Eriksson?

Ms. ERIKSSON. Good afternoon, Chairman Cummings and Members of the Subcommittee.

My name is Berit Eriksson, and I hold an endorsement as an Able Seaman Unlimited and I am a member of the Sailor's Union of the Pacific.

As a working mariner and maritime workforce development specialist, I would like to thank you for the opportunity to address the Committee on the education and workforce development challenges facing the United States maritime industry. The U.S. Merchant Marine is diverse and its workforce problems are complex. I am convinced that mariner workforce development solutions must be as diverse as our industry. I want to primarily address and suggest a potential solution to the problem of the financial challenges facing merchant mariners as they attempt to advance upwards through the maritime career ladder. Commonly known as the hawespipe, it speaks to the difficult transformation of unlicensed mariners into licensed mariners.

First, some background which speaks to the finding of solutions through partnerships. In 2001, the Pacific Coast Maritime Consortium, or the PCMC, was created to meet the immediate training needs brought on by the then-looming 2002 deadline of the STCW Convention. It was a multi-State partnership approach encompassing Alaska, Washington, Oregon, California and Hawaii, and included five maritime unions and six maritime employers.

From 2001 to 2006, the PCMC worked to ensure that qualified U.S. mariners were available in sufficient numbers for the maritime sectors of the West Coast region. During this period, it became clear that the advancement from unlicensed to licensed mariner positions was practically eliminated as a result of the new regulations. We could not accept that, and the Consortium turned to addressing the issue.

As you may be aware, the STCW Convention had created certain unfunded training and certification mandates, which seriously impacted the ability of the industry to meet licensing requirements. Through a grant funded project, we found that it took a little more than two years for an unlicensed mariner working in the towing industry to complete all the certifications required for a third mate towing license at the approximate cost of \$16,000 just for the courses. That is not counting travel and room and board expenses.

Most working mariners find this too daunting a financial hurdle to career advancement. This is a cause for grave concern for when we consider that approximately 95 percent of the mates and masters in the U.S. offshore and coastways towing sector have come through the hawsepipe.

To develop solutions to these challenges, the PCMC hosted several regional maritime roundtable meetings in Alaska, Hawaii, California and Washington with the Skills Panel, where there emerged a strong consensus on the concept of the maritime education loan program. It is modeled after the existing and successful Teachers Educational Forgivable Loan program. The program would provide unlicensed mariners with the means to pursue higher certification by vaulting the financial obstacles by a Government loan that is forgivable only upon demonstration of long-term commitment to the industry.

With this in mind, we drafted sample legislative language as a possible solution to the financial challenges of advancing in a maritime career. The main points of the concept are: the program would be administered by the Maritime Administration; to encourage retention, the loan would be forgiven if the mariner completes 36 months of sea time; the loan may not exceed a lifetime total of \$60,000; the loan may be used for tuition, travel to and from training facilities, room and board, books, loan guarantee fees and other required fees. The loan program would initially be a five year pilot project.

The training institutions would be chosen based on geographic diversity, their ability to administer a Federal program and their possession of appropriate U.S. Coast Guard-approved sites, courses and instructors. Student eligibility would be based on their holding a valid merchant marine document, committing to completing the course of instruction and serving as a merchant marine officer or unlicensed mariner upon the completion of the course of instruction.

The appropriate office for administration of the loan program would be the Office of Maritime Workforce Development within the Maritime Administration. This office should also be the site for other innovative workforce development programs that need to be integrated with the U.S. Coast Guard regulatory requirements. One such program could be a Secretary's discretionary grant program, which exists in Labor, and it would well here, I think, which could fund maritime workforce demonstration projects such as multi-State training projects, demographic and industry needs research projects, entry level enrichment programs and youth school-to-career programs.

In conclusion, I would like to thank you again for this opportunity to present some possible solutions for recruitment, training and retention challenges facing the merchant mariners and the maritime industry today.

Mr. CUMMINGS. Thank you all very much.

Mr. Slesinger, tell me, how difficult is it for a young person who is not a member of a union to get the training they need to move ahead in the maritime industry?

Captain SLESINGER. Right now, it is I would say a matter of circumstance. For instance, for a non-union company, such as our-

selves, if you approached us, some of our best employees are those that have no background and are basically walking up and applying. But what has to happen is a relationship has to develop between that company and that individual where it is a mentor relationship, it carries them through the process. Because there really is no formalized structure or organization that could lead that person through there.

So it is very dependent on the companies they contact and it is very dependent on the type of relationship they can establish with that company.

Mr. CUMMINGS. Captain Sulzer, you were talking about how you went from, in Philadelphia, I think you said, from 125 students to 700, is that right?

Captain SULZER. That is correct, sir.

Mr. CUMMINGS. One of the things that I, what I have tried to figure out is that when I look at the Baltimore school, I think we have a lot of students coming, and some of them genuinely have an interest in maritime. Many of them are just looking for a decent school to go to where they are going to feel safe and feel as if there is learning taking place. I hate to even say that, but it is true.

So I am trying to figure, and because of that, they have had a tremendous success rate in the five or six years they have been there. I don't think it has so much necessarily to do with the curriculum. I think that is going to change, though, and I think that what is going to happen is that the curriculum is going to drive it. I think Baltimore will have a problem in the next two or three years if not, probably less than that, with a waiting list of people trying to get into this school.

What do you see as the problems you have seen so far with the schools you have been involved with? How easy or difficult is it to create a curriculum that truly trains them to go into the maritime industry and do you get the impression that a lot of these young people are basically going to these schools, like I said, to get a decent education, not necessarily going into the industry? And I am sure there are advantages of just having that knowledge, even if they never go into the industry, many of them will go on to college, and may not want to go the route of the industry.

What do you see are the problems and what do you see is attracting young people to the Philadelphia school?

Captain SULZER. You are correct, a good, safe school is the first attraction to the school, since these students don't know what maritime is, as I mentioned before. Our job is, once they get there, to fire up an interest. We chose to start at fifth grade. As Admiral Craine said, the difference in education in fourth and fifth grade, a student goes from being fed education to eating education on their own.

So we chose an earlier model to get these kids interested. In our early program, grades five to nine is what I call the song of the sea, where we take maritime and we infuse it in all the regular subjects. Pilgrims came over on the Mayflower; that is the last most of us ever hear of the Mayflower. It is a ship, it had to navigate. So we start to infuse this at the early grades to get them interested in our programs when they move into ninth grade.

Now, I can give a concrete example of how maritime actually helps these students improve. One particular school that has been around for a while, again, most of these schools have only opened since 2000, so the track record is short. Mar Vista, which is in the San Diego area, has had a long partnership with the Military Sealift Command. They have had a maritime program for five years and they have graduates. What they started to show me the data is that, again, in most of these inner-cities schools, if you show up and go to class, you are going to pass. That is not true every place else.

What happened in this school is, the students, because of Coast Guard requirements for training and passing and documentation, they had to do more than show up in the maritime classes to get by. And an amazing thing happened: they worked hard. When they went back to their regular classes in the afternoon, the brain didn't get shut off. And lo and behold, what started to come up was English, science and the other courses. Because what they learned by making the commitment to maritime, which they made, we didn't force them, is they learned their own skills and they started to develop. That is what really excites me.

I will be honest, at the end of the day, if not a single graduate of Maritime Academy Charter School works on the water, but everyone graduates, we hit a home run. Because you know graduation rates inner city. I have to say that as an educator.

But I am fully convinced that a percentage of those students will go into maritime, and as they come back to the neighborhoods, which they can do, because of transportation, they will talk to their fellow neighbors and that will grow. We have 300 on the waiting list right now. So I am convinced this works and I have seen it.

Mr. CUMMINGS. One of the interesting things, I have visited the Maritime Academy in Baltimore on several occasions. But my last visit, I so happened to get there when the former marine chief warrant officer, Officer Williams, was drilling these students and teaching them to march. And I was just amazed that these kids were doing it. It sort of blew me away that everybody was in line, and he has his marine uniform on.

And the reason why I raise that is you talk about the quasi-military nature, and if you have a quasi-military component there, that it helps with behavior. I kind of saw that, I saw kids that were, I think, I get the impression that they almost want the discipline, they almost want the structure. And I can hardly wait to see them in their uniforms. That, I am sure, will be an even greater boost.

In Baltimore, as many districts are dealing with, we are dealing with gangs and the phenomenon of gangs. We are finding that there are certain things that attract kids to gangs, it is the discipline, it is the family, it is the belonging, things of that nature. When I talk to some of these kids and ask them why do they like the kids, a lot of the very things that other kids tell me attract them to gangs, the identical types of things that attract them to the school, that closeness, that discipline, somebody looking over your shoulder, people going in the same direction that you are going in.

Now, of course the gangs are going negative, the Academy is going positive. Could you comment on that, please?

Captain SULZER. I agree with you. In fact, I just spoke with the lieutenant colonel who runs Western Maritime School up in Buffalo. He and I were talking, and he was about ready to pull his hair out, because he has been there about two years. I said, stay the course. It is going to be rough the first couple of years. I had to sit on discipline boards and everything else, and I felt like Captain Blye sometimes.

But you go through a learning curve where those who are going to get with the program stick with it, and then that number swells and those that aren't going to get with the program leave. Once you turn the corner, the momentum grows. One program we talked about is typically, you give out demerits for bad behavior.

Well, we talked about giving out doubloons as a reward. We ignore the 90 percent of the kids who sit there and want to learn and we focus on the 10 percent. So what I've been advocating is we give out doubloons for making the grade. Everybody knows doubloons, pirates, et cetera. This is what the kids like. You earn these doubloons for good grades and good behavior, and you redeem them at the end of the month. How about some positive rewards instead of negative?

So I agree with you. But the schools will go through a learning curve and then they will turn the corner and it is only going to get better. That is the message I am trying to get out there.

Mr. CUMMINGS. This is my last question. Is there something unique about maritime, say a maritime curriculum in achieving the things that you and I just talked about, as opposed to perhaps a medical type curriculum, preparing them for medical school, preparing them for other types of things? Is there something very unique about maritime that would cause that kind of effect that we are now talking about?

Captain SULZER. Well, as I said, we are an island nation. We all got here by a boat a long time ago. And it is something I believe that people thrive on. When I go to meetings, parents come up to me, they want to know how to get their kids involved. They don't know anything about it, it ignites something in people. I can't put my finger on it. I guess it is just the way we are in this Country. But it is awareness, and it is very important to get the parents involved at an early stage, and maritime will bring them to a meeting. They like it, and that is critical.

Mr. CUMMINGS. Yes, Ms. Eriksson?

Ms. ERIKSSON. Mr. Cummings, when I was working with the Pacific Coast Maritime Consortium, we did have a grant that funded Mar Vista High School, partially. So I was the project coordinator down in San Diego at the time. And the kids were going to school in the building I was in.

And in answer to you, what was one of the things about the curriculum that really got them, and strangely enough, because I was a working mariner, this happens on a ship, the kids who were like the engine kids and the kids who were like the deck kids, they called them the black gang and the knuckle draggers. They identified with being marines. They had that, as you said, that identity like they are not in the gang any more. But now they are like deckies or they are like the black gang. And they take great pride

in that. So I think that is part of what happens within that curriculum.

Mr. CUMMINGS. Thank you very much.

Mr. LaTourette.

Mr. LATOURETTE. Thank you, Mr. Chairman, and thank all of you for your testimony.

Captain Sulzer, is the Mar Vista program the oldest of the 16 that you have laid out in your testimony?

Captain SULZER. No, it is not. It is the most focused, specifically for direct employment upon graduation. Actually, some of the schools go back into 1991. But one of the things is, and I have kind of put them together, I have to clarify, there are maritime schools and there are marine. They are different. Marine schools have typically been around a little bit longer, there are several in Florida. Marine deals with the sciences and biology and oceanography. Maritime is a fairly new phenomenon. And they can work together and they can work in concert, and some schools actually have both programs.

So Mar Vista is focused on marine employment, deep sea, and has a partnership particularly with MSE.

Mr. LATOURETTE. And did you indicate that Mar Vista actually has graduated a class?

Captain SULZER. Yes, sir, they have.

Mr. LATOURETTE. And I know that the Chairman was talking about something that is of great interest to me, and that is, I think it is wonderful to get graduation rates up and so forth and so on, but if we are dealing with people actually going into the business, is there any data available based on that graduating class of how many kids chose to make maritime a career?

Captain SULZER. There is, sir. I don't have it in front of me. It is not great, but it is there. And I guess one indication is, I have people looking for our seniors that haven't even graduated yet. So there is a large interest from employers. And again, I tell employers, I used to be head of personnel at a company. People leave because they don't like your company. You need to start a partnership early on.

The one comment that was made today, I will just take a brief moment to mention, is the cost of mariner training. What I have said to marine employers is, you will spend \$6,000 to \$10,000 on an unknown walking in off the street. How about you give me \$1,000 for my ninth graders and get to know them for four years and build a relationship? That ninth grader is going to stick with you. That is a much better investment than throwing money out at unknowns. That is what I think is a big help.

Mr. LATOURETTE. I think that is exactly right, and that goes into what I want to talk to Captain Slesinger about, and that is apprenticeship programs. Do these 16 institutions that you have put in your testimony have apprenticeship programs as part of their curriculum or no?

Captain SLESINGER. Some do. One issue that has just come up, which I mention in my comments, which was unknown to me, I started working as a mariner with the Corps of Engineers when I was 16. Apparently in the 1980s, some changes were made in the

labor laws that preclude young people, before the age of 18, from working in the marine field. This is a particular problem.

I had KC Shipping offer me four full-term internships this summer for our eleventh graders, and I couldn't get the students involved because of that. Now, maybe something can be done to exempt an apprentice program which is structured and looked at, rather than direct employment. But most juniors are not going to be 18. And it is a problem that is just starting to show up.

Mr. LATOURETTE. Is that a State law or is that a Federal law?

Captain SLESINGER. I believe it is Federal. I am working with some DOL people on that to get a little more information. But that just came out of left field for us.

Mr. LATOURETTE. Captain Slesinger, the apprenticeship programs that you were describing in your testimony indicated that their success is really determinative based upon the company buy-in. And are you finding, because of shortages, because of new training requirements, are you finding companies willing to make that buy-in? Are they eager to do that?

Captain SLESINGER. Yes. Yes, companies are very eager to do that. I think their problem is finding the right vehicle to do it. That is why, in the towing industry, I do not believe that you could have a successful training program unless you involve the companies. These are hands-on jobs and you need people to be out there working with their hands and working on the vessels. We heard earlier testimony that one of the problems with the Academy is the lack of ships. There are many, many tugboats around which could use apprentices and start that training process. But that is key to their success.

Mr. LATOURETTE. This reminds me, I have a lot of folks in the machine business back in Ohio. Most of them are first or second generation people who came from Eastern Europe, most of them are 50, 60, up in years. Like you, they are having trouble attracting young people to make that a career path. Some of the most successful recruitment efforts that I have seen are based upon fellows that have apprenticeship programs, teaching them that it is actually a good career, it can be a rewarding career.

Ms. Eriksson, there has been a lot of talk today about the cost of STWC standards, and you mentioned it, some others mentioned it. I think you mentioned \$16,000, I think one of our earlier witnesses said \$20,000, and maybe they put in the room and board that you said wasn't included in your figure.

I have two questions before I get to your loan proposal. Have these higher standards resulted in a safer maritime working environment, in your opinion? Sometimes we make rules that don't mean much, even when you follow them.

Ms. ERIKSSON. As an unlicensed mariner in like the basic safety training, et cetera, I do believe they have made it safer, especially when I worked for the Alaska Marine Highway in the steward's department, they never drilled that with fire and et cetera. So I found that to be highly of value.

I think when you get into the higher levels, I don't know, because I am not an officer, I am an unlicensed mariner, but just anecdotally, I think some of it became a little too highly regulated. But you have to meet the convention.

Mr. LATOURETTE. Right. And my observation is there is some basic stuff, we had a hearing on marine safety and we had some captains in that indicated when they drilled, they had turnout suits that didn't fit, because somebody got a little chubbier than they used to be when they first got the suit. So there is some basic stuff, like CPR and lifesaving, things like that.

But let me talk to you about your loan proposal, because I am intrigued. I happen to be a big supporter, I think the Chairman probably is, too, that we do recognize in certain industries, we have a national interest in promoting employment in those industries. So we do it, you mentioned teachers, I think we do it with nurses, we do it with physicians. And it is to make sure that under-served areas have the opportunity to be served by health care professionals or teachers, as the case may be.

I understood what your proposal is. Do you think that it needs to be for the entire Country or should we target it towards particular areas that are having difficulty recruiting and maintaining merchant mariners?

Ms. ERIKSSON. In my opinion, it should be a national program, as it would be, then, within MARAD. Because the issues in Alaska are often the same issues as in Florida or in the Gulf Coast and Seattle in terms of the coast-wise, and that is all around the Country, the hawsepipe issue. Though it is designed to even be usable to somebody who wants to get their AB and tankerman, which could cost \$5,000. So I think, but as a pilot project, I think you should target geographically the areas where there is the most need.

Mr. LATOURETTE. Let me ask you just this \$16,000 or \$20,000 or whatever it is, is it your experience and observation that that cost is completely borne by the person who wants to receive that certification? Or do the companies help?

Ms. ERIKSSON. Often a company can help or a union can help. But in terms of like when you are hawsepiping the unlicensed union doesn't necessarily want to pay for you to become licensed and vice versa. Also the traditional independence of mariners, they tend to want to move around. So there are quite a few mariners that will want to get this on their own, or that used to get them on their own with a minimum of expense to get their license and that is all shut down. So you would have to almost indenture yourself, in a way, to get what you needed.

Mr. LATOURETTE. And is it your observation, just so I am clear, that the STWC stuff has taken it from it didn't cost too much to get your license? Is it all in STWC that takes us up to the \$16,000, \$20,000?

Ms. ERIKSSON. My understanding is that the STWC certifications requirements for between AB and mate, it is like flashing lights and stability, et cetera, and GMDSS. I base the \$16,000 on what the Pacific Maritime Institute was charging at the time.

Mr. LATOURETTE. Thank you very much. Thank you, Mr. Chairman.

Mr. CUMMINGS. Just one last question, Ms. Eriksson. Let's talk about women in the industry. What challenges do we have with regard to getting women in this industry? I am just curious.

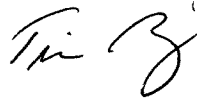
Ms. ERIKSSON. From when I started, when it was hell, to now——

Mr. CUMMINGS. Say that again?

Ms. ERIKSSON. It was hell in the beginning, in the 1970s. But the situation has really changed. It is much better. The academies are turning out really good women officers and stuff. And something I want to not only in terms of women, I want to bring up in terms of this meeting is, we have spent a lot of time talking about officers, where 75 percent of the workforce is unlicensed.

That is where the challenges were for women in the past, especially in the engine room. But that is changing a lot. And some of these programs, like the high school programs, Mar Vista and others, the girls, high school girls, they are doing really well. There are girls coming out of those high school classes, too. It has improved quite a bit. It can get better. It is not as unpleasant any more. There is a lot more acceptance.

Mr. CUMMINGS. Thank you all very much. This ends this hearing. [Whereupon, at 1:50 p.m., the Committee was adjourned.]



Congressman Tim Bishop (NY-01)
Statement for the Record
Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure
October 17, 2007

Mr. Chairman,

With the dramatic increase in maritime commerce the U.S. has seen in recent years, it is a reasonable concern of this committee to ask questions about the workforce behind this industry, ensuring that this workforce is properly trained. As a member of both this committee and the Education & Labor Committee, these issues are in the forefront of my thinking.

It is estimated that our nation's cargo volumes and passenger totals will double in the next twelve years. This dramatic increase would strain any labor infrastructure whether it is auto manufacturers in Detroit or airlines in Chicago.

Of particular concern is the 115 percent increase over the last five years of liquefied natural gas tankers calling on U.S. ports. This is a positive development only if we have the proper infrastructure and a well trained pool of reliable U.S. mariners working on these vessels and facilities.

In the Deepwater Port Act, we gave priority status to license applications for offshore terminals that use U.S. flagged vessels. This was a wise decision, and I am pleased to see the industry begin to move in that direction. I would also hope to see that practice expanded other areas of the LNG industry.

The Standards of Training, Certification and Watchkeeping for Seafarers (STCW) are important in setting qualifications for personnel on merchant ships. The 1995 amendments to the STCW were made in good faith after several major maritime accidents. However, it seems there are some problems to this system that still need to be addressed.

The availability of well-trained, U.S. mariners in the workforce for the burgeoning commerce is of major importance to this committee. I appreciate the participation of today's panelists, and look forward to a discussion of these important issues.

Thank you again, Mr. Chairman for holding this hearing, and I yield back.

SUBCOMMITTEE ON COAST GUARD & MARITIME TRANSPORTATION

“Mariner Education and Workforce”

**October 17, 2007 - 10:00 a.m.
Room 2167, Rayburn House Office Building**

The Subcommittee will come to order

Before we begin, I ask unanimous consent that Congresswoman Laura Richardson may sit with the Subcommittee and participate in this hearing – and without objection, it is so ordered.

Congresswoman Richardson has been elected to represent the 37th District of California, formerly represented by Ms. Juanita Millender-McDonald who was a dedicated member of the Transportation Committee and of this Subcommittee.

While Ms. Richardson has been assigned to the Transportation Committee, her Subcommittee assignments have not yet been announced – but we eagerly anticipate she will serve on our Subcommittee and we welcome her to her first hearing with us today.

Ms. Richardson’s district includes the Alameda Corridor – which provides transportation to and from the Port of Long Beach – and she has previously worked on transportation issues both as a Member of the California Assembly and the Long Beach City Council. I know she understands from the unique position of her district the transportation challenges we confront as a nation – and she shares our Subcommittee’s concern to ensure that our nation’s maritime industry is as strong as it can be. Welcome, Congresswoman Richardson.

Today, our Subcommittee convenes to consider two inter-related topics that are of great importance to the future success of the maritime industry.

Specifically, we will examine the nature, causes, and forecasts of labor shortages in the industry – and we will examine trends and innovations in maritime education.

According to the U.S. Department of Commerce, ports are the gateways through which 80 percent of our nation’s foreign trade enters our country. Commerce in our nation’s maritime sector accounts for approximately \$750 billion of the U.S. Gross Domestic Product.

Waterborne trade, which totaled 2.3 billion metric tons in 2005, is increasing at a startling rate, and the growth in imported cargo – combined with our own domestic production – is creating freight volumes that are straining our transportation networks.

At the same time, significant changes continue to transform the experience of working in the maritime industry.

No longer is the sailor’s life necessarily one of adventure offering a young person the chance both to learn about sailing through on-the-job experiences at sea while occasionally spending weeks exploring port cities around the world.

Deadlines and cost margins are tight and ships sail with the fewest possible number of crew members, who are expected to fulfill multiple duties while keeping regular watches – and who usually spend no more than a few hours in any port.

The significant changes occurring in the maritime industry appear to be contributing to labor shortages that, in turn, threaten to further strain the industry.

The nature and extent of the shortages is not well-quantified and they appear to vary by type of mariner and type of vessel. An important part of our job today is to understand these shortages and to project their potential impact on the various segments of the U.S. maritime industry.

Based on data from the United States Maritime Administration, however, we know that the average age of a mariner with a Master's license is 51 while the average age of a Chief Engineer is 50. Figures also suggest that nearly 30 percent of inland mariners will be eligible to retire in the near future.

There are likely many factors that can contribute to a labor shortage in the maritime industry – and just as the extent of the shortages is not known, the impact of each factor is difficult to assess.

Certainly the lifestyle associated with the maritime industry presents unique challenges. While the lure of the sea has been a siren song to many throughout the ages, many people are also lured by the call of home – and they may prefer to relax with their families at the end of the day rather than retire to a small cabin at the end of a hard shift. Wage differentials between jobs at sea and jobs on land may contribute to shortages – particularly when combined with the lifestyle challenges of life on the water.

Further, significant new standards for training and continuing education have been applied to mariners through the 1995 amendments to the Convention on the Standards of Training, Certification, and Watchkeeping.

These standards serve the critical goal of improving safety in the maritime industry and reducing human factors as the causes of maritime accidents, but they have also had the effect of imposing expensive and time-consuming training requirements on mariners – particularly on unlicensed mariners seeking to climb their way up the “hawse pipe” to command a ship.

There are certainly outstanding facilities in the United States that help train individuals to enter the maritime industry and to advance in their careers – such as the Paul Hall Center for Maritime Training in Piney Point, Maryland, run by the Seafarers International Union – which I have had the honor of visiting – and the Maritime Institute of Technology and

Graduate Studies associated with the Masters, Mates, and Pilots Union – which I have also had the honor of visiting.

However, attendance at such facilities can be expensive and require a significant commitment of time that maritime schedules may not allow a mariner to easily make.

Further, we need to assess whether current maritime education programs have the capacity to meet the demand of those who are just now entering the maritime industry.

In short, our hearing today is intended to enable us to draw a comprehensive picture of the personnel situation of the U.S. maritime industry.

Our examination will inform the future development of policies needed to ensure that our nation has the labor we need to keep maritime commerce flowing – and to ensure that those contemplating working on the water will have the chance to advance along a career path that brings them to new opportunities.

Before I recognize the ranking member, I also want to discuss for a moment a trend in maritime education that is of significant personal interest to me – and that is the growth or, I might say, re-growth of maritime-themed high schools across the nation.

In his written testimony, Captain Art Sulzer, who will appear on our third panel, has presented a very comprehensive discussion of the past history of high school-level maritime education as well as the successes of and challenges faced by the new maritime-themed high schools being created today.

Shortly after becoming Chair of this Subcommittee, I learned that my own city of Baltimore had established a maritime-themed high school several years ago.

After visiting the school, I learned that it had been achieving impressive test results and graduation rates – but the school system had not made the investments necessary to

ensure that the school was truly offering a maritime education that could prepare students for work in the maritime industry.

Over the past summer, I have been working closely with a very dedicated group of individuals from the Baltimore maritime community – including former Congresswoman Helen Bentley – to ensure that the promise inherent in the school’s name – Maritime Industries Academy – was fulfilled and that students could receive a maritime education.

We have succeeded in revitalizing the school’s Junior Naval ROTC program – and have introduced a guest lecture series to bring the maritime community into the school.

We are poised to achieve even greater results with the creation of a new advisory board that will guide the school through the process of applying for a charter – which will hopefully give the school the flexibility it needs to support an expansive maritime curriculum.

I want to briefly acknowledge the significant contributions that many of those who are joining us today are making to the development of this project, including:

- Administrator Connaughton and his staff members, Sharon LeGrand, Shannon Russell, and Richard Corley, who continue to bring the resources of the federal government to support this school.
- MARAD also put us in touch with Captain Sulzer, who has been a key advisor.
- I also thank Mr. Mike Rodriguez, Walt Megonigal, and the Master’s/Mates/and Pilots Union and its MITAGS institution;
- Augustin Tellez and the Seafarers International Union; and,
- Admiral Craine, the President of the New York Maritime Academy, which is creating a new partnership for maritime high schools in which I look forward to having Baltimore Maritime Industries Academy participate.

Every time I visit the school – whose advancement has become a top priority for me – I see first-hand the challenges and the possibilities of maritime education and I gain the kind of insights into the maritime industry that I frankly have not received from any other source.

My experience with this school also makes the subject of today's hearing very personal to me.

I am truly hopeful that school districts around the country can benefit from the lessons that those who are testifying today are learning regarding how best to support the development of maritime schools to open such schools in their local communities.

**STATEMENT of
Chairman James L. Oberstar
Hearing
Mariner Education and Workforce
October 17, 2007**

Mr. Chairman, thank you for scheduling today's hearing on Mariner Education and Workforce. Although vast bodies of water surround the U.S, the general public has little knowledge of maritime transportation and the role it plays on commerce. Americans should be aware of how retail stores get their goods, how foreign cars reach the car lots or how containers on 18 wheelers are transported by sea, rail and truck. The public should have a positive view of the maritime industry and its value to America's economic health.

Vessels are primarily used to transport cargo, whether hazardous, dry bulk, liquids, rocks or people. These goods can be transported across the ocean, along our seaboard or through our rivers. Transporting goods by water is a highly effective method of moving large quantities of non-perishable goods and is significantly less costly than transportation by air for trans-continental shipping.

The Coast Guard's Marine Transportation System study predicts maritime trade to double or triple by 2020. The study also highlights the current downward trend of available mariners, domestic and international, which if it continues, the nation's future shipping demand will not be met.

With this trend, I am concerned that the U.S. will not be positioned to handle the increase in maritime trade. Although there may not be a current shortage of mariners, the statistics of mariner's age and the difficulty of recruiting and retaining the mariners will eventually create a shortage. As 30

percent of inland mariners are eligible to retire in the next seven years and the average age of a merchant mariner with a Master's license being over the age of 50, there is a foreseeable problem in the near future.

I would like to hear workable solutions to resolve this possible shortage before it becomes critical.

Based on witness testimony, we will hear about the effects of the Standards of Training, Certification and Watchkeeping requirements, which are known as STCW. These requirements mandated additional safety training for most mariners. Statistics show that 80 percent of all casualties are caused by human element failure. By improving the human element performance, 80 percent of the casualties can possibly be prevented. There is a place for safety requirements in the maritime industry, but I'm interested in hearing how these standards are being implemented and how they are affecting the mariner workforce.

With regards to mariner education, training lets the mariners know that they are important to the industry. In Houston, Kirby Corporation has a training facility staffed with 18 full-time instructors. They teach everything from Coast Guard approved classes for greenhorns to wheelhouse training and tanker man certifications. The company chooses about 10 out of 100 interviewees to attend its 12 day, 120 hour basic deckhand training. Kirby has a 95 percent retention rate of recruits that come through their training center. They believe there is a cost advantage of growing your own.

That's an example of a company that has succeeded in retaining its personnel by ensuring their training needs are met. Kirby's employees are advancing in the company through the hawsepipe, while meeting the STCW requirements. Employer paid training is an incentive for prospective mariners.

I am looking forward to the testimony of our third panel who will discuss solutions, recommendations and best practices.

Today I hope to learn about the issues that pertain to mariner education and identify areas that are affecting the recruitment and retention of ocean, offshore, coastal and inland mariners.

I look forward to hearing from the witnesses today and to working with the ranking members Mica and LaTourette as we explore the needs of mariners.

**Subcommittee on Coast Guard and Maritime
Transportation
Of The U.S. House Committee on
Transportation and Infrastructure**

**Hearing on
Mariner Education and Work Force
October 17, 2007**

Testimony by:

Carl Annessa

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On behalf of The Offshore Marine Service Association

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Good morning and thank you for allowing us to testify on this subject. My name is Carl Annessa and I am the Chief Operating Officer for Hornbeck Offshore Services, a publicly traded company which owns and operates vessels that support the offshore oil and gas industry, both domestically and internationally. Today I am testifying on behalf of the Offshore Marine Service Association. OMSA is the national trade association representing the owners and operators of U.S. flag vessels that support America's offshore energy infrastructure. By carrying all of the supplies and equipment and many of the workers to and from offshore facilities, our vessels are America's lifeline to the nation's offshore energy resources.

Today's topic is an important and timely one. The maritime industry faces some significant challenges in recruiting and retaining vessel personnel. But before we talk about what is wrong, let's talk about what is right, about the opportunities that are afforded those men and women who serve aboard vessels in our industry.

The maritime profession is an attractive career path for Americans

We don't spend enough time talking about what an attractive career path the maritime industry represents for Americans right now. A man or woman can come into our industry with little or no experience and, in a few years, rise to a position of

responsibility. It is a skilled profession with a clearly defined ladder of advancement. Most of the training is provided by the companies and is available when the mariner is ready to progress. And significantly, pay scales are well above most landside wages.

The offshore workboat industry expects a lot of our mariners, but the job may be demanding, our folks work in an environment in which safety is always the focus. As a result, Americans are statistically safer working on our boats than almost every workplace in the country. In the last safety survey of OMSA member companies, our reportable injury rate was one tenth that of the average American workplace, that includes jobs at sea or on land. And I might add that the survey covered 2006, a period of unprecedented demand when our industry was still rebuilding the offshore facilities damaged by hurricanes Katrina and Rita. Despite the difficulties we faced and our need to hire a large number of new green recruits, we still kept our incident rate at near record lows.

“Coming up through the hawse pipe” is worth protecting.

It is also worth talking about the way our mariners advance from the deck to the wheelhouse. We do hire a number of academy grads and have been impressed with the efforts by the schools to revise their programs to better prepare graduates for jobs on offshore vessels. But our industry still strongly supports the concept of advancing mariners from entry-level jobs on deck up to the wheelhouse as Masters, or from entry-level positions in the engine room to Chief Engineers.

The concept of advancing up the career ladder is known as “coming up through the hawse pipe.” The phrase started with the British navy, but the way it is being practiced on our vessels today is a uniquely American approach.

For evidence of that, just look at the world fleet. You find traveling crews from one country, Able Bodied Seamen from another and officers from still another country. Each country has a specialty and a barrier separates the different positions. It is very rare, almost unheard of in some regions of the world, for a mariner to walk on the vessel as a green hand and one day become a captain.

But in this country and in our industry, that concept is a normal part of doing business. Our approach to our personnel needs is organized around the concept that our employees will advance and rise in their profession. As one company human resources director says: “When I hire entry-level employees, I don’t look for deckhands. I look for future captains.”

For Americans coming into our industry, the opportunity for advancement is defined by their individual skill, energy and dedication. They are rewarded based on their abilities and drive. That is a very American concept and it is something that is worth celebrating and worth defending.

The final point on the offshore career path is that the new generation of vessels that are being built today are designed with the comfort and health of the mariner in mind. Particular attention is being paid to crew quarters that allow mariners to improve the quality of their rest when they are off watch and wheel houses that have been ergonomically designed to help prevent fatigue when the mariner is on watch.

Maritime Personnel needs will be an ongoing concern into the future.

The committee has asked industry for specific information on our mariner needs. First, I need to say workforce shortages are not currently as bad as they have been for the last two years. Following the hurricanes, finding and holding onto mariners was so difficult that companies were often forced to tie up boats and turn down work because they could not find enough qualified mariners to crew them. Fortunately, we are not faced with such a problem now and we may once again have the luxury of being choosy about hiring just the right people.

But that is not to say that the need has gone away. This is more like a lull before the storm kicks up again. OMSA recently surveyed its members on their crewing needs. In addition to our normal, ongoing demand for mariners, the new boats our industry is building will require nearly four thousand new mariners over the next five years. Some of these individuals will be made available as older vessels are retired from service, but not all.

The industry must address concerns over an aging workforce.

Just as it is in many industries, the demographics of the aging workforce are a concern for us. Based on member data, OMSA estimates that 40 percent of our member's licensed officers are over the age of 50, meaning they are in the zone for retirement or reduced time at sea. These are our most experienced, most highly valued mariners. We hope to keep them as long as they want to work. But as we look at our crewing needs on a five-to-ten year horizon, we know we may need to replace four out of every ten officers. Again, we will need that deckhand that we hire today to grow to be a captain in the next decade.

One of the real wildcards on all of this is the Coast Guard's effort to develop policies on medical fitness for duty. No one wants to put a medically unfit mariner in the wheelhouse, but by the same token, we don't want to cut productive careers short because the government took a heavy-handed or ill-conceived approach. We will continue to work with the Coast Guard to produce standards that make sense. At the same time it is clear that whatever the final policy looks like, one of the major initiatives of the future for the maritime industry will be to promote wellness among our boat crews. Congress may want to consider avenues that would help promote the health of aging mariners. For our part we would welcome the chance to partner with the Coast Guard to develop wellness programs for the workboat industry.

Training must be designed to help the mariner progresses up the ladder.

Training is a critical and ongoing part of our reality, whether it is continuing education needed to move up in a mariner's profession or the routine safety, security and other training that is provided to the vessel crews. As I mentioned earlier, most of the training done in our industry is provided by the companies. It is an investment we make in our workforce.

There is a provision in the Coast Guard Authorization Act currently under consideration in the house that would offer a loan program for mariners. We support this concept and would like to see it pass. However, it is only a part of the answer and other approaches are needed. So much of our mariners' training is either paid for by the companies or is reimbursed by the companies once it is completed. Because the companies have taken on the training burden from the mariner, programs that provide incentives for training must involve the vessel companies.

Based on our experience, the most effective training for our industry must:

- Allow for local providers so that it can be accessed easily;
- Be broken in to small bite-sized chunks that allow mariners to take individual courses when they need them;
- Be run by training providers who have close working relationships with the industry so they know what is most effective;
- Be available as needed, i.e. be available next week, preferably on-line, when the mariner comes back to shore, instead of six months from now when the school's regular semester starts; and
- Place a very heavy emphasis on on-board training and assessment.

This last point is worth emphasizing. Our mariners need knowledge and skills that have practical application to their jobs. The best way to learn is by doing and the best way to prove they have learned them is by demonstrating that skill. Theory is of limited value and skill sets that they will never use on board their vessels are of questionable value.

Programs which assist companies with training have been effective.

One of the programs that has proven to be of great value to our member companies is On the Job Training, which pays a portion of the mariners' salaries while they learn the skills they need to advance. OJT could be improved by reducing the paperwork burden on smaller companies. We also find that workforce offices are organized for traditional jobs, where local workers apply for local jobs. Sometimes they are not organized to efficiently offer programs like OJT to an industry like ours where the company, the employee and the actual vessel where he or she may work are each located in entirely different places.

Another program of exceptional value has the Incumbent Worker Training Grant program. Current about 42 states offer some form of incumbent worker training. Louisiana's program is the one that our industry has had the most experience with. Under this program, money spent training mariners may be reimbursed from the state's

unemployment insurance fund. In order to qualify, the training must result in the individual mariner's pay being increased. The program is funded through unemployment insurance premiums. It is a win all the way around. Mariners receive more training, their pay goes up and money paid to the state's per capita unemployment assessment increases. According Louisiana officials, in the last eight years, this state program has provided \$36 million dollars in funding to help train roughly 26,000 thousand employees who work on vessels or in shipyards.

STCW interpretations have been a major obstacle to advancing mariners.

The International Standards for Training Certification and Watchkeeping Code is the crewing qualification and competency standardization regulation for vessels that ply international waters, including those that operate coastal vessels in domestic service beyond the boundary line that defines when a mariner need comply with the certification standards of the Code. The STCW, as it is called, has proven to be a major hurdle for our mariners trying to manage their careers and for OMSA members trying to find commonsense ways to crew their vessels. The STCW is an attempt to create a baseline for the certification of the world's seafarers so that safe and secure navigation may be better insured on a global basis. That is a goal well worth supporting. The problem is that it is primarily focused on the training needs of large, unlimited tonnage (or unlimited size) ocean-going vessels. It requires our captains to study courses that they may never use in their careers. It requires our engineers to learn how to tear down and repair large ship engines that are not used on the types of vessels they will sail on.

Our sector is not alone in this. By OMSA's estimation, 95% of the vessels that fly the U.S. flag are limited tonnage vessels that operate on Coastal routes. Yet most of the mariners on these vessels must meet training requirements that are based on the requirements to sail on the largest supertankers and cargo ships in the world. There is a major disconnect between the Coast Guard's efforts to rigorously enforce the requirements of STCW when those requirements may be inappropriate or overly excessive for the vast majority of the U.S. mariners for whom the USCG grants licenses and certifications.

Right now, this is an obstacle for our mariners, but we can easily foresee the day when this will become an obstacle to the broader public policy objective of encouraging short sea shipping in America. Much short sea shipping is going to involve tug and barge units or smaller ships. As that mode tries to expand over the next few years, it may find itself hamstrung by the overly difficult requirements of STCW, at least the way it is interpreted by the Coast Guard.

But it does not have to be that way. We believe that the code was meant to be flexible and to allow countries to interpret the code liberally. However, the Coast Guard has taken a very rigid approach, been based on a big ship model, that is out of sync with the needs of the vast majority of America's seafarers. Our vessel masters will almost certainly never use a sextant, but they will need to know how to use their radar to safety navigate through

hundreds of offshore structures located in the Gulf of Mexico. We believe that their training requirements should reflect that reality.

Another of the key problems with the Coast Guard's approach to STCW is that it requires mariners to duplicate the exact same training requirements as they move up the career ladder. A mariner sitting through classes to become a third mate will wind up taking many of the same classes to become a master. The maritime industry, through the Coast Guard Merchant Personnel Advisory Committee identified the duplicative material that could be dropped, changed or modified. That change would save time, money and untold frustration. As part of its oversight function, Congress should encourage the Coast Guard to move forward and streamline the STCW training and qualification process.

Another area of concern is the way in which mariners are trained. The world around us has embraced technological improvements in how we learn, including computer-based training, e-learning, distance learning and virtual simulation. The Coast Guard has been reluctant to embrace these tools that are now in common use in nearly every other area of our lives.

It has now been 10 years since STCW was implemented in this country. We have learned a lot about what has worked and what has proven to be unnecessary, overly rigid and even counter productive. The time has come for the Coast Guard to work with industry on a major revamping of how the STCW is implemented in this country.

Congress may need to ensure that that review of STCW takes place and to make sure that when the Coast Guard sits down to represent this country at the International Maritime Organizations sessions on STCW that it is truly representing the needs of the American mariners who have frankly been ill-served by the requirements of STCW.

Coast Guard licensing reform is showing success, but more is needed.

The Coast Guard licensing process has been a hindrance to our ability to recruit and retain quality crews. The subject has received a lot of attention and it is not necessary to outline all of the problems today. OMSA was honored to testify a hearing this committee held on licensing problems last year. The good news is that the Coast Guard has instituted a number of steps that appear to be producing very positive results. The officers in charge of those improvements are to be commended.

Our concern is that the changes being made now don't go far enough. They focus on efficiency, how to reduce delays in the queue of mariners waiting for their licenses and documents to be processed. Even if the Coast Guard solves that problem, the licensing system is still a complex cumbersome mess, developed for another age with another type of mariner in mind. It doesn't meet the needs of our workforce today. It will take resources to fix and that is where Congress needs to become involved. We would urge you to provide the Coast Guard with the funding to revamp the current system.

Maritime workforce shortages are part of a national demographic trend.

Finally, how do we address the crewing shortages that currently face our industry and will continue to be with us in the future? We believe that we need to play to our strengths. At the start of our testimony, we talked about the positives of a maritime career. Now let's look at what our industry can do for the country. We have a unique ability to hire people who don't live anywhere near the water, put them to work for two weeks or a month at a time and then send them home to their own community with a paycheck that is usually well above the prevailing local wage.

This should help us recruit mariners, but it can also help those local communities. The Labor Department has projected that by 2012, the U.S. will have three million more jobs than people to fill them. Some have predicted that this will create a nation of labor "haves and have nots." Cities and states that have jobs but not enough people to fill them are already advertising in cities with surplus labor, trying to entice the best and the brightest to move where there are more jobs and better wages. It is not hard to imagine that in the future, areas with chronic unemployment will run the risk of losing their most productive workers, a sort of "economic dustbowl" phenomenon.

Maritime is uniquely positioned to hire from higher unemployment areas

That's where we come in. We offer a way for people in depressed areas to find quality jobs without having to move anywhere. Employees who come to work with us stay in their local neighborhoods. Their kids continue to go to their local schools, they continue to belong to their local churches and they continue to support their local merchants. Except now when they get off the boat, they go home with a lot more money to spend locally. That should be a very attractive option that allies our interests with the interests of the local community.

We believe that one of the areas that could benefit from this approach is the Mississippi Delta. Just last month a number of OMSA members participated in a career fair held by Homeland Security Committee Chairman Bennie Thompson in Greenville, Mississippi. These companies are making a concerted effort to hire from that region, which as you may know has an unemployment rate above 10 percent. What tends to happen is that when someone goes offshore and starts to see the advantages of that career, they become our most effective advocates, as they bring friends and relatives into the industry.

A pilot project could assist the maritime industry and depressed communities.

We think that approach is worth pursuing as a policy initiative. We would urge Congress to set up a pilot project to help build effective partnerships between vessel companies and economically depressed areas. One important role that the Maritime Administration could play would be to help "sell" the idea of maritime jobs in areas where people have never seen an offshore vessel and have no idea of the opportunities that our industry offers.

If a pilot program were developed it could be set up to provide assistance for local employment specialists and school or college guidance counselors to promote the industry and put interested candidates in touch with maritime companies.

The final piece of this program could be to help provide funding to assist applicants in filing out Coast Guard (and soon TWIC) applications, provide for drug and alcohol testing and fitness for duty physical examinations. Potentially, applicants could receive the five day STCW Basic Training before they apply. An individual who has achieved those goals before applying has an enormous advantage over applicants who have not and will start at a significantly higher salary. Again we think areas like the Mississippi Delta are ideal places to test that sort of creative innovative approach to endemic high unemployment. We would be very pleased to take part in a pilot project to test that initiative.

Conclusion

To recap, we have some real challenges ahead of ourselves in addressing some of the workforce shortages that face the maritime industry. Some of those challenges are based on old negative images of our industry that refuse to die. Some of them are based on the demographics of an aging workforce. And some are based on obstacles that frankly have been placed in our path by government policies and an archaic licensing system.

However, we believe that we can solve the problem by playing to our strengths. We offer a professional career, that allows Americans with initiative to receive the training they need and attractive wages to rise through the ranks to positions of authority and respect. We also believe that our mariners, who undergo rigorous background checks, undergo drug and alcohol testing, and maintain our vessels as one of the safest workplaces in the country, are our the industry's best strength. If we can get that message out to the U.S. workforce, we can meet the needs of the future.

Thank you and I would be happy to answer any questions you may have.

MARITIME EDUCATION AND WORKFORCE HEARING 10/17/2007

How do we get people to want to work in the maritime field?

I am a second generation Mariner and have been in the Maritime Industry all my life. I currently hold the 11th issue of a 5-year renewable Master of Towing Vessel license. A Mariner would say, "I have been there and done that". "That" includes successfully navigating, as Captain, over 10,000 miles of the Mississippi river system, and the Intracoastal Waterway plus attending dozens of Coast Guard and Industry meetings in 14 states and Wash D.C. To be perfectly honest to this committee, I can't come up with even one convincing reason to join this Industry, unless there are major changes in regulations, attitudes, and practice.

Mariners are "at will" employees who depend entirely on the "good will" of management to provide them a good, safe, work environment. Providing a "good, safe, work environment" costs money and that affects profit. Under normal conditions in the transportation industry a regulatory body protects the employees from unscrupulous employers, FAA pilots, DOT truckers, the FRA Railroad engineers. The Coast Guard does not effectively provide this protection. Mariner protection shares the same status as an unwanted stepchild in the Coast Guard. They wanted it initially, but currently they don't have the time or resources. They also have a "conflict of interest" namely the revolving door leading to employment with Maritime companies. Example: The concept that an "at will" employee must notify the Coast Guard of infractions by his employer, in many situations, before they will enforce existing regulations is ludicrous. This puts all Mariners in a box without protection if they have an unscrupulous employer. Since as an individual I resent being put into any box, I can also say there are good companies out there. Remember a "good, safe, work environment" costs money and that affects profit. Good employers can compete. There are others who would like to provide a safe work environment, but can't make a profit if they do. They just "go along to get along". Mariners, once they become aware of this, will find employment in another industry.

All you need to know about fatigue is there is only one cure for it - sleep. The current two-watch system means that a licensed Pilot, because of increased demands on his time, finds it impossible even to follow existing law. A pilot who stands a 6 on and 6 off navigation watch is not in compliance with the 12-hour Rule, 46U.S. Code 8104h, if he has any other duties. However, he is often assigned as the Vessel Safety Officer, and also must see that everyone on the vessel complies with the company's safety management system. In addition he must also manage the crew endurance management system, and attend to other clerical and crew related duties. Safety management rules, where they exist, require unlicensed personnel to work up to 15 hours in any 24-hour period. When at a TSAC meeting in St. Louis, Mo, I suggested an addition to this rule requiring unlicensed personnel be allowed at least 6 hours of uninterrupted sleep in that same 24-hour period. I was refused. This mindset quickly becomes apparent to new recruits.

Another ignored part of the problem, Mariners in the past have always enthusiastically recruited for this industry. Fathers recruited their sons, sons recruited cousins, and others recruited their friends. This industry has been a trade industry. Like all trade industries

families and social ties were very important. Fathers, both pilots and engineers, passed their skills to their sons or to friends. Boats became places where extended social units formed, with the support provided by such units. Many boats drew their entire crews from the same location. This was instrumental to the past success of this industry. People who rode boats and then moved into management recognized this and did not interfere. Then, all of a sudden large corporations bought out small companies; many brought their own management. They lost the continuity gained over the years. New managers treated this industry, not as a trade industry, but as a floating factory. They destroyed all of the social units not only by splitting friends and family, but also by assigning many of them to a different boat every trip. This made it impossible for new social units to form. This one step tore the very soul out of this Industry. Social units can only form among people with similar backgrounds and interests. The definition in the Maritime Industry for "similar backgrounds" is becoming not where you grew up, but where you did hard time.

The factory management's reaction is first they downsize the crews by up to forty percent adding that responsibility to the remaining crew. Then because accidents increase, they come up with a paperwork cure, completely ignoring the fact they caused the problem by downsizing. They make the crew responsible for administering all the paperwork further increasing their load. They are at a loss to understand why people quit because they don't get enough sleep. The result is they have fewer crew with less experience because of recruiting problems and huge turnovers. The second reaction is to recruit parolees, persons on probation, and in drug rehab. This has exacerbated the problem. What sane person would want to live in a work environment where most of the people have already been convicted of acting outside the law? There are people on boats, in positions of authority, who now carry handguns. Other mariners lock themselves in their rooms when they go off watch, and carry all their valuables on their person. This is not exactly an environment a father would encourage his son to join. The final reaction, they add a new office position to identify a problem that is self-evident to all Mariners. The new person knows management won't accept any blame so any cure will just include more paperwork, and the problem grows. The cycle continues, and management still can't understand why nobody will work as a Mariner. This industry is now a true "Humpty Dumpty"; I am not convinced anyone can put it together again.

My proposed solution is a dialogue with Mariners whose advice will not be compromised because they fear retaliation from their employers. Management controls all Coast Guard advisory committees closing off all advice from people who live with the problems daily. It is up to Congress to level the playing field. Regulations forcing the entire Industry to provide adequate manning, ensure the Mariner has a safe work environment, and requires that all Mariners have the opportunity for 7 to 8 hours of uninterrupted rest as prescribed by the new Coast Guard Crew Endurance Manual and recommended by the National Transportation Safety Board more than eight years ago, are long overdue.

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DEPARTMENT OF TRANSPORTATION
STATEMENT OF MARITIME ADMINISTRATOR
SEAN T. CONNAUGHTON
BEFORE THE
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION
OF THE
UNITED STATES HOUSE OF REPRESENTATIVES
ON
MARINER EDUCATION AND WORKFORCE
OCTOBER 17, 2007

Good morning, Mr. Chairman and Members of the Subcommittee. It is indeed a pleasure to be here today to discuss an issue as important as mariner education and workforce. The Maritime Administration appreciates the opportunity to discuss the challenges and opportunities facing the maritime industry in the recruitment, training and retention of qualified mariners.

This is an issue I am familiar with. I graduated from the U.S. Merchant Marine Academy at Kings Point, New York almost 25 years ago. I still remember the excitement of passing my license exam and looking forward to graduation. After four years of school, my fellow classmates and I were anxious to graduate and sail on our merchant marine licenses. However, there turned out to be one significant problem with this expectation: there were almost no seagoing jobs available due to a downturn in the U.S. economy and maritime industry. As a result, I, along with many others, either entered the service or sought whatever maritime-related positions were available.

A tremendous amount has changed since then. Now, U.S. maritime employers are actively recruiting and hiring new graduates from Kings Point and the state maritime academies at California, Great Lakes, Maine, Massachusetts, New York, and Texas. Salaries are up and many seafarers are receiving multiple job offers. Employment opportunities are particularly robust in the offshore energy industry, the inland river system, and in the coastwise trades. The largest single employer of American mariners, the Military Sealift Command, is also aggressively seeking seafarers.

Only months since graduation, approximately 85% of the USMMA and state schools' Class of 2007 is either employed afloat or in the Armed Services and another 12% is employed in the maritime industry.

This is positive news but we are aware that the industry is still facing challenges in recruiting and retaining personnel. Addressing these challenges as well as taking advantage of the opportunities being presented in the international arena are the dual challenges before us today.

Current Maritime Administration Programs

The education of merchant mariners is an essential Maritime Administration responsibility. We must provide the highest quality personnel possible for the complex responsibilities of vessel operations and the demands of economic competitiveness in world shipping, as well as to meet national security needs and to maintain defense readiness. The Maritime Administration meets that need by educating and training young men and women for service in the U.S. merchant marine, in the U.S. Armed Forces, and in commercial activities related to intermodal transportation. The Maritime Administration has several maritime education and training programs.

The Maritime Administration operates the U.S. Merchant Marine Academy (USMMA). USMMA is located at Kings Point, New York. With a total student body of approximately 1000, USMMA graduates around 210 entry level deck and engine merchant marine officers a year. Graduates are obligated to maintain a license as an officer in the merchant marine of the United States for at least six (6) years following the date of graduation from the USMMA as well as serve in the foreign or domestic commerce and the national defense of the United States for at least five (5) years following the date of graduation from the Academy.

In addition, the Global Maritime and Transportation School (GMATS) at USMMA is an education and training arm of the Maritime Administration and a U.S. Department of Transportation (DOT) Learning Center. The mission of the school is to provide advanced education and training for professionals from the maritime community, private sector, government and military. GMATS provides significant Army and Navy training, including the simulation center for the Navy's surface warfare officers. No appropriated funds are used for GMATS; rather, fees are charged for the courses and the school is self-supporting.

The Maritime Administration also supports mariner training at state maritime academies. These schools are located in California, Michigan, Maine, Massachusetts, New York, and Texas. These schools produce a steady stream of almost 700 new licensed officers a year, a number that could grow to take advantage of the increased demand for seafarers. The Maritime Administration

provides training vessels to each of the state maritime academies for use in at-sea training and as seagoing laboratories. The Maritime Administration also provides direct financial support to the state maritime academies for their operations and Student Incentive Payments (SIP) to those students willing to undertake service obligations similar to those of graduates from USMMA.

The Maritime Administration owns and operates a Fire Training Facility in Swanton, Ohio. This facility is available for use by the industry and government entities for basic and advanced firefighting training.

Growing Demand for Mariners

There are reasons for a growing need for mariners. First and foremost is the strong American economy, which continues to need the raw materials, energy and manufactured goods the maritime industry transports so cheaply and effectively. That strong economy has created tight labor markets nationwide and drawn mariners ashore.

We are also experiencing a major recapitalization in practically every segment of the U.S. merchant fleet. The new double-hulled tankers and tank barges, offshore services vessels, ferries and cruise ships, and inland tugs and barges require personnel with advanced training and certifications. This has contributed to increased demand for trained and licensed seafarers to operate these vessels.

While our Nation has a large pool of highly trained licensed and unlicensed mariners, the towing, passenger, and offshore "brown water" operators are reporting shortages of mariners who are qualified and willing to work in these sectors of the industry. However, despite this increased demand, experienced mariners are also retiring or leaving the mariner workforce at a rapid rate due in part to the rising costs imposed on them to upgrade their licenses or advance their qualifications. The passenger industry is also reporting personnel shortages due to the rising costs (merchant mariner documents, drug tests, physicals) of entering the industry as well as from the exodus of qualified mariners who cannot justify the costs of remaining in a heavily regulated industry.

This labor market imbalance is not unique to the United States. The rapid growth in global trade has dramatically increased the worldwide demand for seafarers. Shifting demographics and decreasing interest in sailing have limited the number of new officers from Europe, Korea and Japan. Some industry associations estimate that the licensed officer shortage is currently at 10,000 and will grow as more ships enter the marketplace. Even India, a traditional source of licensed officers for the world's merchant fleets, is examining the use of foreign officers for its domestic fleet because of an acute officer shortage. This international demand has a dual impact on the available mariner labor pool in the United States. On the one hand, it provides new opportunities for U.S. mariners. We want U.S. mariners to be regarded as the best qualified in the world and to be

sought after, as they should be. On the other hand, worldwide mariner demand can attract U.S. mariners away from domestic employment.

Maritime Administration Initiatives

The Maritime Administration is taking action to identify the magnitude of the mariner shortage problem. We are going to conduct a survey of the entire U.S. vessel operating industry to determine where shortages exist. This will serve to verify the anecdotal information we have received and will identify the specific sectors where we need to focus our attention. We are currently awaiting approval to send the survey to the industry for response.

In 2006, the agency established the Mariner Outreach System (MOS), which provides a systematic way to monitor the adequacy of our nation's deep sea qualified merchant mariner pool and to track and maintain contact information and qualifications of mariners. The Maritime Administration has partnered with the U.S. Coast Guard National Maritime Center (NMC) to utilize data from the USCG Merchant Mariners Licensing and Documentation (MMLD) system which is critical to analyze and monitor trends in the mariner population. MOS is an invaluable tool that enables the Maritime Administration and its partners to make valid vessel and human resources projections, identify potential mariner shortfalls, and facilitate crewing of vessels should a mariner shortage occur.

Over 41,000 licensed and unlicensed U.S. mariners have consented to participation in MOS. Additionally, MOS now provides the following capabilities:

- Provides the analysis necessary to monitor the current status of the deep sea mariner pool and the factors affecting that pool.
 - Improves the Maritime Administration's ability to understand and communicate with mariners.
 - Provides analysis on the QMED (Qualified Member of the Engine Department) population to be used by the NDTA-sponsored working group on mariner availability to determine the cause of the current decline in the QMED population as well as its impact on crewing the surge vessels.
- Provides the capability to track the increase in LNG-qualified mariners.
- Provides up-to-date mariner qualifications, contact data and crewing requirements in a single system that can be accessed by the Maritime Administration (and other customers in a national emergency) when existing crewing practices have exhausted the mariner pool.

We intend to expand MOS to include other industry sectors in addition to deepsea. This will enable us to better track mariner availability and qualifications

in the brownwater area and to disseminate information and communicate with mariners in that sector.

We are also meeting with industry groups to hear firsthand their labor experiences. In fact, we just conducted a meeting with the Offshore Marine Services Association (OMSA). They shared their assessment of the current labor situation and their forecast of future demand in the offshore sector. OMSA is very concerned about mariner shortages and welcomed the opportunity to discuss possible approaches to this issue with the Maritime Administration. On our part, we appreciated their insights and will add their information to our ongoing analysis of the potential shortage problem.

As a related matter, the shipbuilding industry is also experiencing significant labor shortages. The same industry recapitalization with new vessel construction that is creating a demand for mariners is also creating a demand for shipyard workers. The Maritime Administration held a conference in July to which it invited every shipyard in the United States. The attendees overwhelmingly identified worker shortages as a major issue. In response, we reached out to the Department of Labor (DOL) to obtain information about apprenticeship programs and other forms of assistance. We then facilitated a meeting with DOL, the Shipbuilders Council of America and the American Shipbuilding Association. As a result, we are hopeful that the shipbuilding community has a promising avenue to explore which will assist them in meeting their workforce challenges.

We also plan to expand our discussions with DOL into the mariner arena in order to address brownwater shortages. We believe that training opportunities can be developed which could not only reduce the cost to companies for entry level employees but also significantly reduce the cost burden to a mariner of acquiring additional necessary skills.

As a proactive step to address the brownwater mariner demand, we have instituted a policy allowing our maritime academy graduates to fulfill their service obligations to the Government in the brownwater sector of the industry. Previously, service in this sector of the industry did not meet the service obligations for maritime academy graduates. By changing this policy, we have increased the pool of mariners available for service in the inland and offshore industries.

We are active participants in major working groups that focus on mariner issues. For example, we participate in the NDTA working group on unlicensed engineers and various USCG advisory committees that address a myriad of mariner issues facing the industry. We are also exploring an initiative to work with USCG to obtain credit for Navy sailors for their Navy training which will allow them to transition easily into a merchant marine career once they retire from the Navy.

We have embarked on an effort to increase cadet billets on vessels. These billets are essential to our training programs because without sufficient sea time cadets cannot take the examination to become a merchant marine officer. This last Monday, I signed, on behalf of the Maritime Administration, an agreement with Overseas Shipholding Group, Inc, (OSG) that will provide training

opportunities for American maritime academy cadets on board OSG's international vessels. This public-private partnership is the first formal agreement to make available on-board training billets in the international commercial fleet for U.S. maritime academy cadets. Under the terms of the agreement, cadets from the U.S. Merchant Marine Academy and all six state maritime academies will be able to obtain work experience and training on board OSG vessels. OSG is a market leader in global energy transportation services for crude oil and petroleum products in the U.S. and International Flag markets. OSG's owned, operated and newbuild fleet totals 144 vessels.

In its recently completed realignment, the Maritime Administration created the Office of Maritime Workforce Development. This office is responsible for the management and development of policy and plans for the recruitment, training and retention of maritime workers both ashore and afloat. As well as working with DOL on programs to alleviate the current shortage of shipyard workers, the office is developing secondary school programs to introduce young Americans to the opportunities presented by a career in the maritime industry.

I would like to address this further. It is important to recognize that career opportunities in the maritime industry are not widely known among youth and young adults. Therefore, the Maritime Administration has embarked on a campaign to raise awareness about career and employment opportunities in the industry. Through the years, we have developed and implemented initiatives with a youth and young adult focus to familiarize them with maritime career paths, educational institutions, and potential resources in order to attract them to career opportunities in the maritime industry. To achieve this, we participate in a number of school events and activities, including career fairs and trade expositions.

Most recently, my staff participated in a discussion group at the Baltimore City Maritime Industries Academy. Chairman Cummings and representatives from various maritime industry organizations were also there. The group came together in June of this year to discuss ways to best structure the USMMA's curriculum with a specific focus on maritime related studies. As a result, Maritime Administration staff members as well as members of the maritime community will serve as guest speakers through the 2007-2008 school years to raise awareness among students about the importance of the maritime industry and the employment and training opportunities for U.S. merchant mariners. As members of the maritime community, we are committed to further assist the Maritime Industries Academy, in coordination with Chairman Cummings' office, in formalizing the Academy's structure to support a strong maritime curriculum for our future young leaders.

The Maritime Administration has also been involved for many years in supporting the interest and training of young men and women who desire to go to sea as a career after high school. A number of new programs and training institutions have developed around the country to train and assist younger students in

pursuing maritime careers. The agency is supporting the Ship Operations Cooperative Program in its research study to identify middle and high school maritime institutions and programs around the world to document the successes and failures of various programs, develop best practices and link industry, government and local schools for future support.

The Maritime Administration also plays a major role in the development and certification of mariner security training standards which have become so critical as part of the war on terror. Training courses for security must be approved by the Maritime Administration, and we regard this as a vital part of our responsibilities.

Most recently, we have begun to develop proposed revisions to the regulations governing the USMMA and the state academies. These regulations have not been updated in over 20 years, and we expect to propose significant changes, particularly in allowing graduates to meet their service obligations in the brownwater sector.

LNG Opportunities

I'd now like to focus on a specific area of opportunity, the expanding Liquefied Natural Gas (LNG) market and highlight some recent successes we have experienced. By the year 2030, the United States' demand for natural gas is projected to increase by 20 percent to 26.1 trillion cubic feet per year.¹ Industry analysts also project that as demand increases, domestic production will decrease and account for only 79 percent of consumption. To accommodate this shortfall, the U.S. will need to increase the amount of natural gas imports to 4.4 trillion cubic feet per year in 2030, an increase of 750 percent.²

The importation of LNG will serve to relieve the nation's growing energy needs by diversifying energy sources. Deepwater ports are necessary to enhance the nation's ability to import LNG from worldwide sources by oceangoing LNG tanker vessels. Notably, advances in LNG tanker size, the increased number of LNG carriers in the worldwide fleet, and improvements in LNG transfer technology have made importing LNG increasingly more efficient and cost effective. Increased consumer demand for LNG will clearly require new and expanded terminal infrastructure as well an increase in the nation's pool of U.S. mariners to serve on these sophisticated vessels.

Strong competition from China, Japan, and Korea for both energy resources and mariners has led to intense competition within the LNG industry. It has also led to the lack of a single U.S.-flagged LNG vessel. Consequently, few U.S.

¹ The data is from the Energy Information Administration's *Annual Energy Outlook, with projections to 2030*.

² The data is from the Energy Information Administration's *Annual Energy Outlook, with projections to 2030*.

mariners have the opportunity to gain vital hands-on experience in this growing industry. Recent industry reports have concluded that the number of mariners with LNG experience is rapidly declining. It is estimated that as many as 3,700 to 5,000 additional mariners may be needed by the year 2008.³ If the shortage of mariners is not addressed, the magnitude of this problem could negatively impact the LNG industry's excellent safety record.

This shortfall problem is not unique to the LNG shipping industry, but is rather a reflection of the manpower crisis which faces the global shipping industry that I referred to earlier. Analysts have further asserted that the loss of experienced LNG officers is expected to be a worldwide problem by 2010. This loss of experienced mariners coincides with the growth of the global LNG carrier fleet. Over the last 5 years, the LNG carrier fleet has grown by 73 percent, from 128 to 222 vessels⁴; and by the year 2010, an approximate 130 additional LNG vessels are scheduled for delivery to service the global LNG trade industry.⁵ This expanded fleet will require as many as 10,000 additional seafarers, of whom almost 3,000 will be licensed officers.⁶

The world's maritime community must meet this growing challenge without compromising safety and competency levels. The competence level of mariners is the most critical element in the transportation of LNG. As such, there is an immediate need to educate and train qualified U.S. LNG officers to meet the demands of this expanding industry.

Recognizing the need to increase the presence of U.S.-flag vessels and U.S. mariners in our worldwide LNG industry, Congress amended the Deepwater Port Act through the Coast Guard and Maritime Transportation Act of 2006, directing the Secretary of Transportation to develop and implement a program to promote the transportation of LNG to the United States on U.S.-flag vessels. Under this amendment, the Maritime Administrator, by delegated authority from the Secretary, must give top priority to all deepwater port applicants that commit to utilize U.S.-flag vessels in their port operations. The Maritime Administration interprets this requirement to include both domestic and foreign-flag LNG vessels providing gas to deepwater port facilities licensed by the Agency.

The Maritime Administration supports the premise that U.S. mariners should play an integral role in the importation of LNG to ensure and provide the highest level of safety and security to our nation's ports. Because of this, and in response to these legislative directives, the Maritime Administration has developed a voluntary Deepwater Port U.S. Manning Initiative to encourage the employment of highly trained and skilled U.S. mariners to meet the current and forecasted

³ Reported by Reuters, June 20, 2006.

⁴ Colton Company, *Summary of LNG Carrier Construction Activity in 2006*.

⁵ Colton Company, *The Orderbook of LNG Carriers* (as of July 11, 2007)

⁶ Financial Times, *Officer Cadre Shrinks as Fleet Grows*, June 19, 2006.

demand for professional mariners in the international LNG shipping industry. The agency strives to ensure that reliable supplies of U.S. citizen mariners are available to serve on LNG vessels calling at all U.S. ports.

Currently, the Maritime Administration is working with the USMMA, state maritime academies, and other training facilities to develop and expand innovative educational programs for U.S. mariners. The goal is to provide immediate employment opportunities for entry-level mariners, both licensed and unlicensed, into the LNG industry upon graduation, and to participate in course development for the retraining and/or recertifying of current mariners who are sailing on vessels other than LNG – thus enabling the transition into LNG service.

Over the past year, we have begun to see tangible results from our efforts to establish innovative public-private partnerships with deepwater port license applicants. In December 2006, the Agency announced a partnership with SUEZ Energy – the first official collaboration of its kind in the international LNG industry. Under this agreement, SUEZ committed to train and employ U.S. citizen officers, cadets, and unlicensed mariners aboard their tanker fleet and at both their planned deepwater ports proposed for construction and operation off the coasts of Boston and Florida. Another recent deepwater port applicant, Excelerate Energy, entered into a similar agreement for its planned Northeast Gateway deepwater port to be located in Massachusetts Bay, and its existing LNG deepwater port, Gulf Gateway, located in the Gulf of Mexico. Additionally, Excelerate has established a partnership with Texas A&M University to place students and instructors on Excelerate Energy's ships for training and educational purposes. Further, in January 2007, the Louisiana-based applicant, Freeport-McMoRan Energy, committed to work with the Maritime Administration to develop programs to train and employ U.S. mariners on LNG vessels that will service the Main Pass Energy Hub port planned for construction and operation off the coast of Louisiana.

More recently, the Maritime Administration entered into an agreement with Woodside Energy to register two new LNG regasification vessels under the U.S.-flag national ship registry. Although the vessels will be constructed overseas, they will be fully manned with U.S. citizen crews upon delivery to the United States. These vessels will service the OceanWay deepwater port terminal planned for construction and operation off the coast of Southern California. More than 90 American officers and crew will be employed on each of the vessels calling at the OceanWay port. Woodside Energy has also made additional commitments to provide training and employment opportunities for U.S. officers, cadets, and unlicensed mariners aboard their entire tanker fleet.

It is important to note that from an economic and competitive perspective, the growing worldwide shortage of trained and qualified LNG ship officers has created an opportunity for U.S. officers to work aboard foreign-flag LNG vessels. International vessel operators are dramatically increasing the wages and benefits

offered to foreign officers to keep or attract their services, thus narrowing the gap between the wages and benefits paid to Americans and those paid to their foreign counterparts.

The Maritime Administration will continue to reach similar voluntary agreements with our pending and future deepwater port applicants and all energy companies serving the nation's international maritime markets. It is our ultimate goal to provide adequate job opportunities for Americans while ensuring the safe, secure and efficient importation of LNG to our Nation's shores.

Conclusion

Mr. Chairman and members of the Subcommittee, we are now seeing a perfect storm in which the demand for mariners, particularly those who are licensed, is increasing while the supply may not be keeping pace. This provides incredible opportunities to the young men and women who are just beginning their careers as well as those who are already in the industry. We welcome the career paths open to our young people but, at the same time, recognize that they may contribute to shortages in industry sectors such as brownwater

The Maritime Administration stands ready to pursue other initiatives to address mariner issues such as developing training courses necessary for brownwater operation and analyzing the tax inequities facing U.S. mariners in the international trade

I look forward to assisting you in addressing an issue that is vital to our economic and national security. I would like to thank the members of the Committee and Chairman Cummings for your leadership in recognizing the importance of this issue and in holding this hearing today. I will be happy to answer any questions that you might have.

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Testimony of

Vice Admiral John W. Craine, Jr., USN (Ret.)
President, State University of New York Maritime College
President, Consortium of State Maritime Academies

Subcommittee on Coast Guard and Transportation
Committee on Transportation and Infrastructure

Hearing on Mariner Education and Work Force

October 17, 2007
10:00 AM
2167 Rayburn House Office Building

Mr. Chairman, distinguished members of the Subcommittee, on behalf of our nation's six state maritime academies, I thank you for calling this hearing, and I appreciate the opportunity to share with you the critical contribution our state maritime academies make to our national security and the economic health of our nation.

After providing some background information, I will make the following three points about the value of the six state maritime academies—California, Great Lakes, Maine, Massachusetts, New York and Texas:

- 1. Our state maritime academies are the single largest source of new licensed officers for our nation, educating 70% of the new officers in the most recent year.**
- 2. There is a compelling need for more state maritime academy graduates to meet the growing needs of the U.S. Armed Forces and commercial maritime industry.**
- 3. State maritime academies are an extraordinary bargain for our nation, but they need more help from the federal government to keep up with the growing demand for licensed mariners.**

I know I do not have to explain to this Subcommittee how important our maritime industry is to our nation. It goes without saying that behind the curtain of daily life as we know it, the living, beating heart of international trade binds us to the rest of the world and supports our way of life. As with our own human hearts, we generally do not take notice of its function as we go about our daily tasks. But one thing is for certain: if it stopped beating, the arteries of commerce that connect the nations of the world would be shut down. The impact of international trade on our way of life is in evidence everywhere and in everything--the clothes that we are wearing today, the television we watched this morning, the banana we ate for breakfast, the car we drove to get here and the gas we put in it. The list is endless.

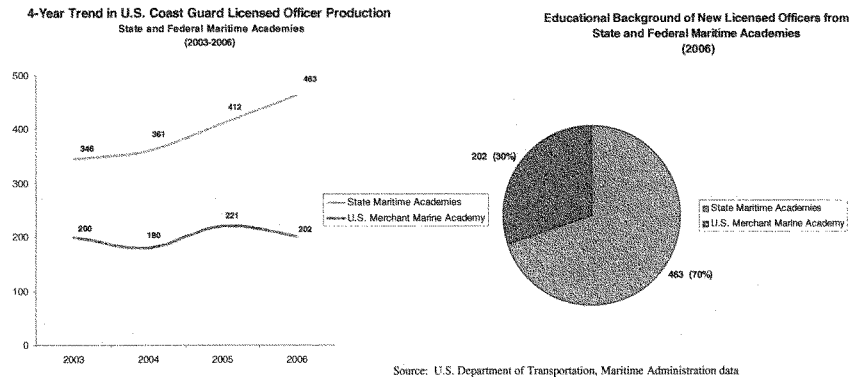
And this is not a new phenomenon. The maritime industry has been our nation's lifeblood since its inception. Back then, our trade with other countries flowed as it does today, from navigable inland waters and the open ocean. Many of our principal cities--Boston, New York, Philadelphia, Baltimore, Norfolk, Charleston, Houston and San Francisco--all grew around maritime commerce. The spark that led to the writing of our constitution--the Virginia Resolution--came from maritime commerce, and there are more constitutional clauses dealing with maritime commerce than with any other subject!

Today, international trade remains our nation's lifeblood, and the people behind the scenes who make it possible for it to thrive are the seafarers who operate and maintain our ships and ports. The maritime industry rests uniquely at the intersection of a number of activities. It is inherently an international business intertwined with the economic and political aspects of trade and foreign policy. It is at the hub of a vast intermodal transportation enterprise requiring managerial skills, from finance and logistics to administration. The industry embraces a wide range of technology, from the essential infrastructure of materials and energy to the most sophisticated communication and control systems. It requires highly skilled, resourceful and disciplined operators for its primary agents -- ships. The mission of the state maritime academies is to

recruit, educate and place the highly trained seafarers who play a crucial role in our national security and in keeping global commerce flowing freely.

Now let me turn to my three main points.

1) State maritime academies are the single largest source of new licensed officers in the U.S.



If I could leave you with only one point today, it would be this: The state maritime academies produce the vast majority of all new licensed officers in the U.S. each year and while the state maritime academies are an extraordinary value for our nation, they need more federal government support in meeting the growing demand for licensed merchant mariners who play such a critical role in our national security. In 2006, 70% of the new licensed officers were graduates of the state maritime academies, a percentage that has grown steadily over the past several years and is expected to continue to increase. (See charts above.) This is important both from the perspective of the Military Sealift Command (MSC) of the U.S. Department of Defense, which must compete with the commercial fleet to hire new licensed officers, and our national commercial fleet, which as will be discussed later faces an overwhelming need for new mariners. If you visit virtually any major shipping company in the United States, you will find that the majority of its new officers are state maritime academy graduates.

Recruiting young men and women for a maritime career is a significant challenge. The general public knows very little about the maritime industry and still less about the lifestyle and skill-sets required of a modern merchant mariner. Unlike a commercial airline pilot, a merchant captain works mostly out of sight and is therefore out of the mind of the general public. In recruiting prospective students, we highlight not only the value of a world-class maritime education, but also the acquisition of technical skills, the hands-on training that comes from six months aboard our training ships, and leadership development. Similarly, we emphasize the broad array of

career paths available within the maritime industry, including, but not limited to, international business, transportation and trade, oceanic and atmospheric sciences, and engineering and technology applied to global commerce. With shipboard education and training at the core of these programs, we highlight the many opportunities students have to lead and the self-discipline they gain from a regimented lifestyle-skills that will allow them to be successful in any endeavor they may undertake throughout their lives. We also highlight the opportunity to travel and experience other cultures during the summer or winter sea terms, as students aboard our training ships visit at least a dozen foreign ports during their time in college.

We ask a great deal of our students in return for this education. The minimum number of credit hours required for graduation is 162, versus the norm of 130 for other colleges, and our students spend six months at sea during their summer and winter breaks. This makes our recruiting incentives very important in attracting prospective students.

As a recruiting tool, the state maritime academies offer in-state or regional tuition as an incentive to prospective students. California Maritime Academy, which is part of the California State system, offers reduced tuition rates to 10 western states. The State University of New York Maritime College, which is part of the State University of New York system, offers in-state tuition rates to students residing in 14 coastal states and the District of Columbia, from Rhode Island to Louisiana. Massachusetts Maritime Academy offers in-state tuition rates to 2 states and regional rates to 12 others. Maine Maritime Academy offers in-state tuition rates to 5 states and regional rates to residents of Puerto Rico, Quebec and other Canadian provinces. Great Lakes Maritime Academy offers in-state tuition to Pennsylvania, Ohio, Illinois, Wisconsin and Minnesota, while Texas A&M, which is part of the Texas A&M system, offers in-state tuition to all 50 states.

The federal Student Incentive Payment (SIP) Program exists to assist students participating in the federal Merchant Marine license program. It provides funds to offset the cost of uniforms, books and subsistence, in return for a service obligation in the Merchant Marine Reserve (MMR). While this is a valuable program, it does not as currently structured serve as an up-front incentive for participating in the Merchant Marine license program, and the annual stipend has not kept pace with inflation.

The state maritime academies ask for your support in enhancing the SIP Program as part of our recruiting efforts to attract more students and keep pace with the demands of our growing maritime industry. Changing the program to allow students to apply for the MMR and SIP prior to their freshman year, as is the case with Reserve Officer Training (ROTC) Corps programs, will make this a more attractive program for many reasons. It will provide for an up-front payment to students entering the program, which will in turn increase the number of students in the Merchant Marine license and MMR programs and increase the number of active duty military officers originating in the MMR pipeline. It will also increase the military sealift surge capability, as there will be more MMR officers available to staff military sealift ships in times of crisis and fill strategic logistical positions ashore.

The current SIP payments of \$4,000/year for four years, which eligible cadets begin receiving in their sophomore year, is less than half what it costs to provide uniforms, books and subsistence,

the stated purpose of the program. We ask that an \$8,000 up-front payment be provided to students at the beginning of their freshman year, with annual follow-on payments of \$8,000 for their sophomore, junior and senior years, and an overall cap of \$32,000. This will enable the SIP payment to cover a percentage of educational costs on a level closer to what it covered 25 years ago.

In terms of the education provided by the state maritime academies, a wide array of undergraduate and graduate programs is offered to support the maritime industry. Degrees are offered in the general areas of international business, engineering, humanities and science. At SUNY Maritime College, for example, specific degrees are offered in marine business and commerce, marine electrical and electronic systems, marine engineering, marine operations, marine transportation, maritime studies, naval architecture (one of only six such programs nationwide), facilities engineering and marine environmental science, as well as a master's degree in international transportation management.

The flexibility of the curricula offered by the state maritime academies allows them to quickly meet emerging needs of the industry, such as port and maritime security, liquefied natural gas (LNG) training and ship management.

2) There is compelling evidence that the supply of new licensed officers in the U.S. is falling far short of the demand.

There is an extraordinary demand for licensed officers in this country. Rarely does a day go by that we do not hear from shipping company executives about their need for new officers. Placing our graduates is therefore the easiest part of our mission; however, even with record enrollment at our nation's state maritime academies, without increased support from the federal government, we simply cannot produce enough graduates to keep up with the growing demands of the maritime industry. The vast majority of our students are placed before graduation, and they receive multiple employment offers. Engineers are hired as engineering watch officers for MSC and other shipping firms; naval architects and project engineers are sought out by Naval Sea Systems Command, Naval Intelligence, the Navy's nuclear power program, national shipbuilding facilities and major ship design firms. Our graduates are hired as electrical engineers for large electrical power plants, as engineering service supervisors for major heating and air conditioning manufacturers, and as facilities engineers for hospitals and large industrial power plants. The demand for our non-engineering students is just as great. They are hired as deck officers by MSC, National Image and Mapping Agency, National Oceanic and Atmospheric Agency, commercial, tanker and cargo ships and as tug and barge operators. Each year, a large percentage of our graduating classes goes into the military. At SUNY Maritime College, for example, 15% of our last graduating class went into the Navy or Marine Corps. Other graduates go into the U.S. Coast Guard, while others serve in port and maritime security positions at port terminals throughout the country. Others become marine surveyors and harbor and river pilots. Virtually all graduates have immediate employment or job offers at graduation, and during the following three months, all graduates will have been hired. Our graduates' starting salaries are some of the highest in the nation. As an example, the average starting salary for the California Maritime Academy Merchant Marine License graduating class of 2007 was \$64,000.

The state maritime academies have statutory obligations and are accountable to several federal and international organizations. These relate to programs which qualify students for licensure as merchant ships' officers, and they operate under regulations set by the Maritime Administration (MARAD), the United States Coast Guard (Coast Guard), and the International Maritime Organization (IMO), an agency of the United Nations.

The federal government, through the Department of Transportation and MARAD, furnishes our training ships, provides for their major maintenance and repair and provides for a small direct payment to the academies for maintenance and support. The training ships are generally older former naval or cargo ships that have been converted to carry cadets and serve as training platforms. The ship currently assigned to Texas A&M is a former Navy cargo ship that is not deployable as a training ship due to the lack of federal funds needed to convert it for suitable school use. The conversion of the ship assigned to Massachusetts Maritime is still incomplete, awaiting additional federal funds. The oldest of the six ships is 46 years old, and while it is still a well maintained and useable training ship, it is operating beyond its original service life and will soon need to be replaced. These training ships are vital to the education of our nation's Merchant Marine license students because of the irreplaceable hands-on training environment they provide and because of the Coast Guard's at-sea STCW-95 assessments requirement for the Merchant Marine license. They are also valuable assets in national emergencies. Three of our ships were activated by the President to house and feed relief workers during Hurricanes Katrina and Rita. They should be considered critical national assets and funded accordingly.

In return for the support provided by the federal government through MARAD, the academies agree to provide courses of instruction in navigation, marine engineering and the operation and maintenance of vessels, in a curriculum of no fewer than three years' duration. The U.S. Code of Federal Regulations (CFRs) requires that the instruction include at least six months aboard a training ship, in cruise status, and also requires students to take the professional examination administered by the Coast Guard. In fact, the passing of the federal Coast Guard license exam is a requirement for graduation in the license degree programs.

The agreements further require each academy to establish and publish a set of rules and regulations governing cadet discipline, provide a demerit system to assess compliance with these regulations and submit a statement indicating that the student is suitable for U.S. Merchant Marine service.

The Coast Guard is the federal agency responsible for determining and validating the qualifications an applicant must possess to become a deck or engine officer in the Merchant Marine of the United States. The Coast Guard administers a professional licensing examination and issues the appropriate federal Merchant Marine license and other Merchant Mariner documents.

Under the auspices of the IMO, the International Convention of Training, Certification and Watchkeeping for Seafarers was promulgated in 1978 and amended in 1995. It provides the legal framework for the application of mandatory technical Standards of the Seafarers' Training, Certification and Watchkeeping (STCW) code. The STCW code provides international standards for those involved in educating, training, or assessing the competence of seafarers and,

as adopted by the Coast Guard, often mandates class sizes, course duration, and the technical laboratory and training equipment required by academies to meet the standards. In addition to the federal license, the Coast Guard issues an STCW-95 endorsement to graduates of academy license programs.

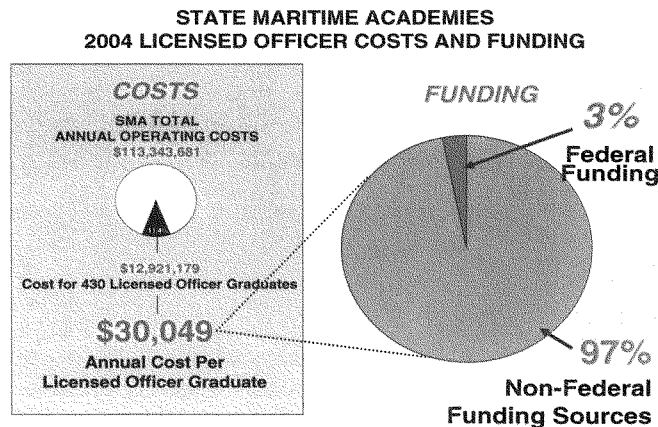
It bears repeating that each year, the majority of all new licensed officers in the United States graduate from our nation's state maritime academies, and this is important both from the perspective of MSC, which must compete with the commercial fleet to hire new licensed officers, and our national commercial fleet, which faces an overwhelming need for new mariners to keep pace with the growth in global commerce.

While some observers of the maritime industry may not understand or recognize the crucial role the state maritime academies play in our national security, MSC, the organization responsible for transporting military goods throughout the world during peacetime and in times of crisis, certainly does. In 2005, while in command of MSC, Vice Admiral David Brewer expressed his belief in the importance of the state maritime academies, as follows:

Quite simply, it would not be possible to meet our U.S. Merchant Mariner licensed officer manpower requirements without the many qualified graduates of the state maritime academies...over 90% of the combat cargo and supplies required by the men and women of our U.S. Armed Forces during war is delivered aboard sealift ships crewed by U.S. Merchant Mariners.

A complete copy of Admiral Brewer's letter is attached.

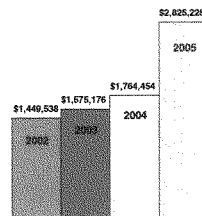
3) State Maritime Academies are an extraordinary bargain for the federal government.



Source: White House Office of Management and Budget (OMB)

Despite the fact that the state maritime academies and their Merchant Mariner graduates play a critical role in our national security, only 3% of the schools' funding comes from the federal government. The remaining 97% of the operating revenues for the state maritime academies comes from state funding, tuition and the maritime industry. Currently, the typical annual federal contribution to the state maritime academies falls somewhere between \$10 million and \$13 million for all six state academies combined, which is less than the state academies received from the federal government 15 years ago! Our requirements and costs have increased significantly over the last decade, while our federal assistance has actually declined. And, the vast majority of federal funds never reach the operational accounts of the academies.

STATE MARITIME ACADEMY
Annual Fuel Costs (2002-2005)



Considering the fact that state maritime academies produce 7 out of every 10 of our nation's newly licensed officers each year, that a Commander of MSC has stated that our national military sealift requirements could not be met without these graduates, that several of the state maritime academies' training vessels have been diverted for humanitarian use during national emergencies such as Hurricanes Katrina and Rita, that feedback from the commercial shipping industry indicates a shortage of merchant mariners, which could adversely affect our nation's ability to keep the lanes of global commerce operating safely and efficiently, we believe the federal government's investment needs to be far more substantial than the current \$10-13 million. We therefore ask your help in increasing the level of federal funding to support the important mission of the state maritime academies.

We will continue to carry out our mission of recruiting, educating and placing the world's best trained mariners, and we believe that a continued strong partnership with the federal government will enable us to better serve the needs of our nation and our world. Thank you, Mr. Chairman.

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p. 2



DEPARTMENT OF THE NAVY
 COMMANDER MILITARY SEALIFT COMMAND
 914 CHARLES MORRIS CT SE
 WASHINGTON NAVY YARD DC 20398-5540

REFER TO:

March 30, 2005

VADM John R. Ryan
 President
 SUNY Maritime College
 6 Pennyfield Avenue
 Bronx, NY 10465


Dear Admiral Ryan,

I wanted to take this opportunity to thank you for your recent visit, which underscored the critically important contribution that the State Maritime Academies are making to the military sealift capability of our nation. Quite simply, it would not be possible to meet our U.S. Merchant Mariner licensed officer manpower requirements without the many qualified graduates of the State Maritime Academies.

As you well know, the State Maritime Academies are the largest single source of new licensed officers each year. The increasing complexities of the licensed officer profession, as well as the new, more rigorous requirements of the international Standards of Training, Certification, and Watch (STCW) keeping, have only increased the importance of four-year degree programs like those at the State Maritime Academies. These more rigorous training, education, and licensing requirements mean that the State Maritime Academies, which are important now, will only become more important from a military sealift perspective in the future.

The Military Sealift Command is proud of its strong, symbiotic partnership with the State Maritime Academies. Over 90% of the combat cargo and supplies required by the men and women of our U.S. Armed Forces during war is delivered aboard sealift ships crewed by U.S. Merchant Mariners. Thus, America's military sealift capability is critical to our national defense, and a vital component of that capability is the manpower contributed by the State Maritime Academies.

Sincerely,


 D. L. BREWER III
 Vice Admiral, U.S. Navy

04/11/2005 MON 09:41 [TX/RX NO 8129]

Statement of
Ms. Berit Eriksson
Former Executive Director
Of the
Pacific Coast Maritime Consortium

Before the
Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure
United States House of Representatives

October 17, 2007

220 W. Olympic Place, Seattle, WA. 98119
206-551-1870

Good Morning Chairman Cummings and members of the subcommittee. As a working mariner and maritime workforce development specialist I would like to thank you for the opportunity to address the Committee on the education and workforce development challenges facing the United States maritime industry. As you have already heard, the U.S. merchant marine is diverse and its workforce problems are complex. There are a variety of solutions which are specific to each problem, and that suggests that there is no single "silver bullet" solution to manpower problems in the U.S. merchant marine. I am convinced to the contrary, in fact, as are many of the maritime training professionals with whom I associate, that mariner workforce development must be as diverse as our industry. Such an approach would include the further development and support of high-school and community college programs. The highly successful high-school program in San Diego at Mar Vista, the adult program at Grant Union High School in Sacramento, the Seattle Community College Maritime Academy, where mariners are not only trained to meet the requirements of the industry, but where they are also connected to jobs in the industry. It is important to realize that maritime training and apprenticeship must continue in all its present forms, but I want to primarily address a small but important corner of the industry, and suggest a potential solution to the problem of the financial challenges of merchant mariners as they attempt to advance upwards through the maritime career ladder. Commonly known as the hawsepipe path, it speaks to the difficult transformation of unlicensed mariners into licensed mariners. First, some background.

In 1999 while working as an able seaman for the Alaska Marine Highway System I was asked to participate in Labor/Management approaches to help solve personnel and training issues. This led to a unique regional alliance called the Pacific Coast Maritime Consortium, created to meet the immediate training needs brought on by the then looming Standards of Training, Certifications and Watchkeeping 2002 deadline. It was a multi-state approach encompassing Alaska, Washington, Oregon, California and Hawaii and included 5 maritime unions and 6 maritime employers. From 2001 to 2006, the Pacific Coast Maritime Consortium, under the direction of its combined labor and management Board of Directors, worked to promote and fund mariner recruitment, training, and career ladder programs in order to ensure that qualified U.S. mariners were available in sufficient numbers for both the commercial and civilian military maritime sectors. Over the course of those five years, the Pacific Coast Maritime Consortium secured approximately 2.5 million dollars in federal, state and local funding along with 1 million dollars private match for the training of more than 2000 mariners. These trainees ranged from high school students in Imperial Beach, CA., incumbent mariners in Alaska, to hawsepipers in Washington State. During this period, as the immediate training needs were met, it became clear that the advancement from unlicensed to licensed mariner positions was practically eliminated as a result of the new regulations. We could not accept that, and the Consortium formed in part to address the issue.

As you may be aware, the international treaty of 1978 (as amended) called the Standards of Training, Certifications and Watchkeeping Convention had created certain unfunded training and certification mandates which seriously impacted the ability of the industry to meet licensing requirements. Through a grant funded project, we found that it took a little more than 2 years for an unlicensed mariner working in the towing industry

to completed all the certifications required for a third mate towing license at the approximate cost of \$16,000 for just the courses not counting travel, room and board expense. I know a mariner who mortgaged his home for \$30,000 so that he could get his towing license. This is a cause for grave concern when we consider that approximately 95 percent of the U.S. offshore fleet and coastwise towing sector and 30 percent of US deep sea sector Mates and Masters have come thru the hawsepipe. Compounding the problem, the workforce is rapidly ageing with 50% of the workforce at over the age of 45 and only 20 % is under the age of 35. Newly restrictive medical and physical fitness requirements converge with the restrictions of the Transportation Worker's Identification Credential to suggest a rapidly approaching wave of mariner retirement and an associated recruitment and training challenge. Add to this that many of our foreign maritime competitors enjoy various forms of government subsidization, making it difficult for U.S. companies to compete on a level playing field.

To develop solutions to these problems, the Pacific Coast Maritime Consortium hosted several West Coast regional maritime roundtable meetings of labor, industry, education and workforce development stakeholders in Alaska, Hawaii, California and Washington. Most effective among these groups is the Washington State Skills Panel among whose members are several former Pacific Coast Maritime Consortium board members. From these regional roundtables, there emerged a strong consensus on the concept of the Maritime Education Forgivable Loan Program, which would address the hawsepipe problem. Modeled after the existing and successful Teachers Education Forgivable Loan program administered by the U.S. Department of Education, the concept has the support of Ship Operators Cooperative Program and the Merchant Marine Personnel Advisory Committee as well as many maritime industry associations (see attached letters). Simply put, the program would provide unlicensed mariners the means to pursue higher certification by vaulting the financial obstacles via a government loan that is forgivable only upon demonstration of a long-term commitment to the industry.

The enabling legislation for this maritime loan concept is found in U.S. Code 46, A-Shipping, Chapter 27, Subchapter XIII§ 1295. In a Congressional declaration of policy the language reads *"In furtherance of this policy the Secretary of Transportation is authorized to take the steps necessary to provide for the education and training of citizens of the United States who are capable of providing for the safe and efficient operation of the merchant marine of the United States at all times and as a naval and military auxiliary in time of war or national emergency."*

With this in mind we drafted sample legislation language (See Attachment #1) as a possible solution to the financial challenges of advancing in a maritime career. The main points of the concept are:

- The program would be administered by Maritime Administration in accordance with regulations adopted by the Maritime Administration
- To encourage retention, the loan would be forgiven if the mariner completes 36 months of sea time.
- The loan may not exceed \$15,000 in a calendar year nor exceed a lifetime total of \$60,000

The loan may be used for tuition, travel to and from training facilities, room and board, books, loan guarantee fees and other required fees.

- The loan program would initially be a 5 year pilot project.
- The training institutions will be chosen based on geographic diversity, their ability to administer a federal program and their possession of appropriate U. S. Coast Guard approved sites, courses and instructors.
- Student eligibility will be based on their holding a valid Merchant Marine Document, committing to completing the course of instruction and serving as a merchant marine officer or unlicensed mariner upon the completion of the course of instruction.
- To insure greater probability of success Officer in Charge candidates would be assessed for language and math skills to determine readiness.
- The fiscal administration would be within the Maritime Administration.

The appropriate office for administration of the loan program would be the Office of Maritime Workforce Development within the Maritime Administration. This office should also be the site for other innovative workforce development programs that need to be integrated with US Coast Guard regulatory requirements. One such program could be a Secretary's Discretionary Grant Program (See Attachment #2) which could fund maritime workforce demonstration projects such as multi-state training projects, demographic and industry needs research projects, entry level enrichment programs and youth school-to-career programs. Through the Office of Maritime Workforce Development the highly regulated workforce training requirements of the maritime industry could thus be integrated with other programs administered by the Maritime Administration for the development and maintenance of a well-balanced U.S. merchant marine. For example, the connection of school-to-career high school programs with entry-level billets in the Maritime Security Program would strengthen and benefit both of these Maritime Administration initiatives.

In conclusion I would like to again thank you for this opportunity to present some possible solutions to recruitment, training and retention challenges facing the Merchant Mariners and the maritime industry. For both security and commercial reasons the United States must make serious investments in the workforce infrastructure of it's merchant marine.

Attachment #1**Maritime Education Loan Project****ENABLING U.S. LEGISLATION**

US Code 46, A- Shipping, Chapter 27, Subchapter XIII § 1295.

***Congressional declaration of policy** It is the policy of the United States that merchant marine vessels of the United States should be operated by highly trained and efficient citizens of the United States and that the United States Navy and the merchant marine of the United States should work closely together to promote the maximum integration of the total seapower forces of the United States. In furtherance of this policy the Secretary of Transportation is authorized to take the steps necessary to provide for the education and training of citizens of the United States who are capable of providing for the safe and efficient operation of the merchant marine of the United States at all times and as a naval and military auxiliary in time of war or national emergency.*

Suggested language for a forgivable loan program to be administered by the US Maritime administration-USDOT.

MARITIME EDUCATION LOAN PROGRAM

The US Congress directs the Secretary to establish a maritime education loan program to encourage merchant mariners to enter into maritime training programs and to provide an incentive for mariners to pursue their careers as US Merchant Mariners.

Maritime education revolving loan fund.

(a) There is created a Maritime Education revolving loan fund. The fund shall be used to make education loans to eligible students. Repayments of principal and interest on a Maritime education loan shall be paid into the Maritime education revolving loan fund and shall be used to make new Maritime education loans. If estimated funds available are inadequate to fully fund estimated Maritime education loans for any fiscal year, additional funding from the general fund may be requested and appropriated for that year.

Administration.

- (1) allocate the loan awards available for Maritime education loans annually; and
- (2) develop and distribute to approved maritime training providers an application form for Maritime education loans; the form must include a requirement that the applicant supply all current US Coast Guard documents, certifications, proof of US citizenship or permanent legal status and a statement of intent to enter a maritime career.
- (b) The Maritime Administration shall approve the applicants to the Maritime education loans according to the eligibility criteria.

Conditions of and limitations on loans.

- (a) If a borrower meets the Maritime education loan eligibility criteria and enters into employment at sea as a mariner, the portion of the loan that shall be paid by the Maritime Administration is the following percentages of the total loan received plus interest up to a total of 100 percent of the total loan:
 - (1) Upon completion of 240 days total sea time on U.S. vessels - 25 percent;
 - (2) Upon completion of 480 days total sea time on U.S. vessels - 50 percent;
 - (3) Upon completion of 720 days total sea time on U.S. vessels - 75 percent;
 - (4) Upon completion of 960 days total sea time on U.S. vessels - 100 percent;
- (b) A loan may not exceed \$15,000 in a calendar year, exclusive of loan guarantee fees.
- (c) Proceeds from a Maritime education loan may be used only for post-secondary expenses of books, tuition, required fees, loan guarantee fees, travel to and from training facility, room and board.
- (d) Maritime education loans made to a student may not exceed a lifetime total of \$60,000.

Pilot program

- (a) The Maritime education loan program will initially be a 5 year pilot project.
 - (1) Maritime training institutions will be chosen based on geographic diversity, the ability to administer the program and may include Federal, State and Commercial training institutions.
 - (2) Eligibility criteria for training providers will be based on;
 - (A) Ability to administer a federal loan program
 - (B) Possession of appropriate U.S. Coast Guard course, site and instructor approval
 - (3) Each maritime training institution will be eligible for funding at an annual maximum of \$300,000.

Student selection criteria.

- (a) To be eligible for a Maritime education loan, a student must
 - (1) Hold a valid U.S. Coast Guard Merchant Mariner Document (MMD);
 - (2) Each Maritime candidate shall as a condition of acceptance into the Maritime education loan program sign an agreement committing such individual—
 - (A) to complete the course of instruction
 - (B) to fulfill the requirements for a license as an officer in the merchant marine of the United States (with the exception of the training and/or education funded by this program) on or before the date of graduation from the Maritime program of such individual and;

- (ii) to maintain a license as an officer in the merchant marine on vessels documented under the laws of the United States and serve as an officer in the merchant marine officer on vessels owned and operated by the United States for at least 36 months of service at-sea following the date of graduation from the Maritime program of such individual or;
- ii) serve as an unlicensed merchant mariner on vessels documented under the laws of the United States or on vessels owned and operated by the United States for at least 36 months of sea service following the date of graduation from the Maritime program of such individual;

(C) to be certified, if the candidate holds the appropriate license, in MTSA 2002 training and commit to be available for sailing on government sealift surge vessels in time of national need;

(D) to serve as a merchant mariner on vessels documented under the laws of the United States or on vessels owned and operated by the United States or by any State or territory of the United States;

(3) Officer in Charge candidates or Towing License candidates will be assessed for language and math skills to determine readiness. Unlicensed mariners that would like to upgrade to a deck or engine Officer in Charge license will be determined eligible if they meet the reading, writing, math and verbal skills criteria as prescribed by the Secretary.

(4) Officer in Charge candidates or Towing License candidates enrolled in this program may be required to take additional adult education classes if the candidate does not in fact possess the language and math skills to enroll in the program.

Repayment Obligation

(a) Participants in the Maritime Education Loan Program incur an obligation to repay the loan, with interest and an equalization fee, unless they meet the sea time requirements under rules adopted by the Maritime Administration.

(b) The interest rate shall be determined annually by the Maritime Administration. Participants who fail to complete the sea time requirements for forgiveness shall incur an equalization fee based on the remaining unforgiven balance of the loan. The equalization fee shall be added to the remaining balance and repaid by the participant.

(c) The minimum payment shall be set by the Maritime Administration. The maximum period for repayment shall be ten years, with payments of principal and interest accruing quarterly commencing six months from the date the participant completes or discontinues the course of study. Provisions for deferral of payment shall be determined by the Maritime Administration.

(d) The entire principal and interest of each payment shall be forgiven for each payment period in

which the participant completes sea time requirements until the entire repayment obligation is satisfied. Should the participant fail to meet the sea time requirements before the participant's repayment obligation is completed, payments on the unsatisfied portion of the principal and interest shall begin the next payment period and continue until the remainder of the participant's repayment obligation is satisfied.

(e) The Maritime Administration is responsible for collection of repayments made under this section and shall exercise due diligence in such collection, maintaining all necessary records to insure that maximum repayments are made. Collection and servicing of repayments under this section shall be pursued using the full extent of the law, including wage garnishment if necessary. The Maritime Administration is responsible to forgive all or parts of such repayments under the criteria established in this section and shall maintain all necessary records of forgiven payments.

(f) Receipts from the payment of principal or interest or any other subsidies to which the Maritime Administration as administrator is entitled, which are paid by or on behalf of participants under this section, shall be deposited in the Maritime Education Loan program account and shall be used to cover the costs of the Maritime Education Loans, maintaining necessary records, and making collections under subsection (5) of this section. The Maritime Administration shall maintain accurate records of these costs, and all receipts beyond those necessary to pay such costs shall be used to approve loans for eligible students.

(g) The Maritime Administration shall adopt rules to define the terms of repayment, including applicable interest rates, fees, and deferments.

Authorization

(a) There is authorized to be appropriated \$ 3,500,000 for each fiscal year 2008-2012

Attachment #2

Suggested Language for a National Maritime Competitive Grant Program to be administered by the US Maritime administration-USDOT.

ENABLING U.S. LEGISLATION

US Code 46, A- Shipping, Chapter 27, Subchapter XIII § 1295.

Congressional declaration of policy It is the policy of the United States that merchant marine vessels of the United States should be operated by highly trained and efficient citizens of the United States and that the United States Navy and the merchant marine of the United States should work closely together to promote the maximum integration of the total seapower forces of the United States. In furtherance of this policy the Secretary of Transportation is authorized to take the steps necessary to provide for the education and training of citizens of the United States who are capable of providing for the safe and efficient operation of the merchant marine of the United States at all times and as a naval and military auxiliary in time of war or national emergency.

NATIONAL MARITIME RECRUITMENT AND TRAINING PROGRAMS

(a) Strategic plan

(1) In general

After consultation with States, Localities, Industry and other interested parties, the Secretary shall, every 2 years, publish in the Federal Register, a plan that describes the demonstration, pilot, multiservice, research, and multistate project priorities of the Department of Transportation concerning entry level Merchant Mariner recruitment and training for the 5-year period following the submission of the plan. Copies of the plan shall be transmitted to the appropriate committees of Congress.

(2) Factors

The plan published under paragraph (1) shall contain strategies to address national Merchant Marine recruitment, employment and training problems and take into account factors such as--

- (A) the availability of existing research (as of the date of the publication);
- (B) the need to ensure results that have interstate validity;
- (C) the benefits of economies of scale and the efficiency of proposed projects; and
- (D) the likelihood that the results of the projects will be useful to policymakers and stakeholders in addressing entry level Merchant Mariner recruitment and training problems.

(b) Demonstration and pilot projects

(1) In general

Under a plan published under subsection (a) of this section, the Secretary shall, through grants or contracts, carry out projects for the purpose of developing and implementing techniques and approaches, that demonstrate the effectiveness of these methods in addressing entry level Merchant Mariner recruitment and training needs. Projects shall demonstrate effectiveness of services that enhance employment opportunities and shall include an evaluation component and may include--

- (A) the establishment of maritime technology skill centers developed through local partnerships of industry, labor, education, community-based organizations, and economic development organizations to meet unmet skills needs of the Maritime Industry;
- (B) projects that provide training to upgrade the skills of employed workers who are employed in the Maritime Industry;
- (C) programs conducted jointly with the Department of Defense to develop training programs to meet the needs of Maritime defense contractors and the Military Sealift Command;
- (D) projects that promote the use of distance learning, enabling students to take courses through the use of media technology such as videos, teleconferencing computers, and the Internet;
- (E) projects that assist in providing services to address Maritime recruitment and training of youth residing in targeted high poverty areas within empowerment zones and enterprise communities;
- (F) the establishment of partnerships with national and regional organizations with special expertise in developing, organizing, and administering Merchant Mariner recruitment and training services,;

(2) Limitations

(A) Competitive awards

Grants or contracts awarded for carrying out multi-service, research, multi-state, demonstration or pilot and long term projects under this subsection shall be awarded in accordance with generally applicable Federal requirements.

(B) Eligible entities

Grants or contracts may be awarded under this subsection only to--

- (i) entities with recognized expertise in--
 - (I) conducting national or demonstration projects;
 - (II) utilizing state-of-the-art demonstration methods; or
- (ii) US Coast Guard approved public and private entities with expertise in operating or overseeing Maritime training programs

(C) Time limits

The Secretary shall establish appropriate time limits for carrying out projects under this subsection. Entities that meet performance objectives may be eligible for annual funding.

(c) Multi-service projects, research projects, and multi-state projects

(1) Multi-service projects

Under a plan published under subsection (a) of this section, the Secretary shall, through grants or contracts, carry out multi-service projects--

- (A) that will test an array of approaches to the provision of training services to a variety of targeted populations;
- (B) in which the entity carrying out the project, in conjunction with employers, organized labor, and other groups such as community coalitions, will design, develop, and test various training approaches in order to determine effective practices; and
- (C) that will assist in the development and replication of effective service delivery strategies for the national Maritime Industry as a whole.

(2) Research projects

(A) In general

Under a plan published under subsection (a) of this section, the Secretary shall, through grants or contracts, carry out research projects that will contribute to the solution of Maritime Industry recruitment and training needs in the United States

(3) Multi-state projects

(A) In general

(i) Authority

Under a plan published under subsection (a) of this section, the Secretary may, through grants or contracts, carry out multi-state projects that require demonstrated expertise that is available at the national or regional level to effectively disseminate best practices and models for implementing Maritime recruitment and training services designed to address industry-wide skill shortages.

(ii) Design of grants

Grants or contracts awarded under this subsection shall be designed to obtain information relating to the provision of services to various demographic groups in order to provide guidance at the national and State levels about how best to administer specific Maritime recruitment and training services.

(4) Limitations

(A) Competitive awards

Grants or contracts awarded for carrying out projects under this subsection in amounts that exceed \$100,000 shall be awarded only on a competitive basis, except that a noncompetitive award may be made in the case of a project that is funded jointly with other public or private sector entities that provide a substantial portion of assistance under the grant or contract for the project.

23rd Semi-Annual Meeting of MERPAC

April 6, 2005

MEBA School

Easton, Maryland

Introduction and Welcome

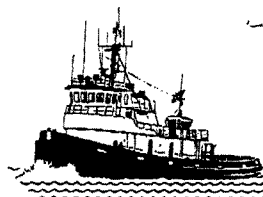
The 23rd semi-annual meeting of the Merchant Marine Personnel Advisory Committee (MERPAC) was convened at 0832, on April 6, 2005, by chairman Andrew McGovern. Other MERPAC members in attendance were Captain Mohan Dadlani, Chief Mary Culnane, Ms. Dorenda Canty, Mr. Roy Murphy, Captain Joe Murphy, Captain Nick Grassia, Captain Beth Gedney, Chief Katie Haven, Mr. Bill Eglinton, Captain Ken Dawson, Mr. Glenn Pigott, and Mr. Mike Surgalski.

Excerpt below from page 7 of full minutes report

With regard to the briefing by the Pacific Coast Maritime Consortium seeking funding for a hawsepipe educational loan project, MERPAC recommended that:

Since the new STCW training requirements for hawsepipers are causing a significant reduction in the number of people who are choosing to advance from unlicensed to the rank of Licensed Officer; and since there is concern that there may actually be a shortage of Licensed Officers if this trend continues; and since an informal survey last year showed that most unlicensed mariners are willing and even eager to get training, but cost prevented them from doing so;

Therefore, MERPAC endorses the concept of Federal funding for mariners to pay for the cost of attending USCG approved training.



SAUSE BROS.

155 E. MARKET AVE. • COOS BAY, OREGON 97420
TELEPHONE: (541) 269-5841 • FAX: (541) 269-5866

Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

May 10, 2006

RE: Maritime Education Loan Program

Ladies and Gentlemen:

Sause Bros. Inc., a member company of American Waterways Operators, would like to express our support for the proposed Maritime Education Loan Program. The tug and barge industry and our company face many challenges in these times. One of these challenges is to improve the shortage of unqualified and non-license holding mariners within the United States Merchant Mariner ranks.

The proposed legislation would go far in alleviating the current barriers that are discouraging incumbent mariners who wish to upgrade into licensed classifications or higher MMD endorsements.

Respectfully,

Dale Sause
President
Sause Bros., Inc.



SAUSE BROS. OCEAN TOWING CO., INC. • SAUSE BROS., INC. • SOUTHERN OREGON MARINE, INC.



WESTERN TOWBOAT COMPANY

Doing the Job... Whatever It Takes

April 12, 2006

RE: Maritime Education Loan Program

Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

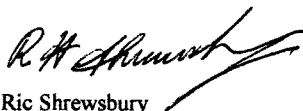
Ladies and Gentlemen:

Western Towboat Company would like to express its support for the proposed Maritime Education Loan Program. The towing industry and our company face many challenges in recruiting qualified, competent mariners to man our vessels.

A major hurdle for those interested in pursuing a career aboard towing vessels is the cost of regulatory required training and certification. This is particularly burdensome for those mariners who have chosen the traditional career path of advancement by working their way up the through the "Hawsepipe". Currently there is an acute shortage of financial resources available to this pool of potential professional mariners.

The proposed legislation would go far in alleviating the current barriers that are discouraging incumbent mariners who wish to upgrade into a licensed position or higher unlicensed endorsement.

Respectfully,



Ric Shrewsbury
Owner
Western Towboat Company
Seattle, Washington



DUNLAP Towing Company

2702 Federal Avenue • Everett Washington 98201
Telephone: (425) 259-4163 • Fax: (425) 259-6305

April 11, 2006

RE: Maritime Education Loan Program
Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

Ladies and Gentlemen:

Dunlap Towing Company would like to express it's support for the proposed Maritime Education Loan Program. The towing industry and our company face many challenges of which not the least is the time and cost of certification as it applies to mariners advancing up the maritime career ladder or "Hawsepiper". The proposed legislation would go far in alleviating the current barriers that are discouraging incumbent mariners who wish to upgrade into a licensed position or higher unlicensed endorsement.

Respectfully,

A handwritten signature in cursive script, reading "R. Russell Johnson".

R. Russell Johnson
Director, Safety and Training



HARLEY MARINE SERVICES, INC.

P.O. Box 24005, Seattle, Washington 98124-0005
910 SW Spokane Street, Seattle, Washington 98134
Tele. (206) 628-0051 Fax (206) 628-0293

08 June 2006

Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

RE: Maritime Education Loan Program

Greetings:

Harley Marine Services, Inc. (HMS) is a marine services provider operating on the West Coast of the United States. The HMS fleet includes 27 tugs and 23 barges. The primary service areas include bunker fuel delivery to visiting merchant ships, tanker escort, ship assist for arrivals and departures, and coastal towing of commodities and containers. The company employs over 300 American citizens in the Jones Act trade of the contiguous states.

Harley Marine Services would like to express its' full support for the proposed Maritime Education Loan Program. The towing industry faces many challenges in attracting persons to a seafaring life. The entry hurdles for a person wishing to go to sea in this trade are high and the continuing education costs are prohibitive for a person trying to maintain a house and family while advancing up the hawsepipe.

This legislation would encourage new mariners to consider this industry for employment and a career. Finding, developing, and retaining mariners in the current and foreseeable marketplace will be a great challenge for this company and this industry. The proposal will assist the domestic fleet to grow and support the industry and trade of our country by offering U.S. citizen mariners with necessary assistance in the high cost of training and advancement.

Sincerely,

A handwritten signature in dark ink, appearing to read 'George C. Clark', is written over a horizontal line.

George C. Clark
Director, Safety & Regulatory Affairs

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

ALASKA MARINE HIGHWAY SYSTEM / GENERAL MANAGER

STATE OF ALASKA
FRANK H. MURKOWSKI, GOVERNOR

ALASKA MARINE HIGHWAY SYSTEM
7559 North Tongass Hwy.
Ketchikan, Alaska 99901-9101
PHONE: (907) 228-7250
FAX: (907) 225-1520

June 20, 2006

Subcommittee on Coast Guard & Maritime Transportation
Room 585
Ford House Office Building
Washington, DC 20515


Re: Maritime Education Loan Program

Ladies and Gentlemen of the Subcommittee:

Speaking for the Alaska Marine Highway System, I would like to express support for the proposed Maritime Education Loan Program.

The maritime industry and our system face many challenges – not the least of which is the time required for and cost of certification as it applies to mariners advancing up the career ladder (or Hawsepipeline). The proposed legislation would go far in alleviating current barriers that discourage incumbent mariners wishing to upgrade into a licensed position or higher unlicensed endorsement.

Respectfully,



Captain John F. Falvey, Jr.
General Manager
Alaska Marine Highway System

JFF:mbr



June 6, 2006

Re: Maritime Education Loan Program

To Whom It May Concern:

Foss Maritime Company, a member of the American Waterways Operators, would like to document our full support and commitment to the proposed Maritime Education Loan Program. The United States Merchant Marine, the tug and barge industry, and our company, face numerous significant issues. One of the primary issues today is the recruitment, training and licensing of personnel to populate our vessels.

As of February 1, 2002, all U. S. mariners who serve on the high seas and near coastal waters must have met the STCW Basic Safety Training Standards. Additional STCW certifications are required for officers, mates, and other licensed personnel, as well as for skilled deck and engine personnel. All these mandated, non-funded federal certification requirements present major financial and logistical challenges to maritime employers and employees.

Additionally, due to economic pressure to remain competitive in international trade, most entry-level training positions on U. S. merchant vessels have been eliminated over the last 20 years. This presents a significant challenge in sustaining a viable pool of U. S. Citizen Merchant Mariners. The traditional "on-the-job" training career path, from an entry-level seaman to a licensed officer, is now a route with significant obstacles due to lack of apprentice positions, onerous and costly training, and certification requirements.

Furthermore, the industry is not attracting new mariners at a rate necessary to replace retiring workers. Currently, an estimated 50% of the maritime workforce is over 45 years of age. These trends have already caused a national imbalance in the supply and demand for qualified mariners. The current moderate shortage on the U. S. West Coast could further deteriorate into a severe skills shortage nationwide in the years ahead.

The Maritime Education Loan Program is an important concept for our nation, the Pacific Coast region and our company. We are concerned by the lack of trained and qualified merchant mariners. This legislation recognizes the need, and provides loan funding, for training to an industry that is vital to this country. Not only does it benefit the national transportation network, but it strengthens our national defense by increasing the number of trained maritime personnel.

The proposed legislation is an important step toward encouraging our nation's men and women to become United States Merchant Mariners. We offer it our full support.

Sincerely,

Bruce Reed
Vice President Operations



International Organization of
Masters, Mates & Pilots

700 Maritime Boulevard, Linthicum Heights, MD 21090-1941
Telephone: 410-850-8700 • Fax: 410-850-0973
Internet: www.bridgedeck.org • E-mail: iommp@bridgedeck.org

TIMOTHY A. BROWN
International President

GLEN P. BANKS
International Secretary-Treasurer

May 25, 2006

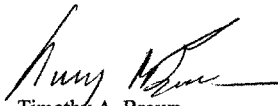
Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

RE: Maritime Education Loan Program

Ladies and Gentlemen:

The International Organization of Masters, Mates and Pilots would like to express its support for the proposed Maritime Education Loan Program. Today the U. S. Maritime industry faces many challenges of which not the least is the time and cost of certification as it applies to advancing up the maritime career ladder or "Hawsepipes". The proposed legislation would go far in alleviating the current barriers that are discouraging incumbent mariners who wish to upgrade into a licensed position or higher unlicensed endorsement.

Respectfully,



Timothy A. Brown
International President



Inlandboatmen's Union of the Pacific

MARINE DIVISION -- INTERNATIONAL LONGSHORE & WAREHOUSE UNION
NATIONAL OFFICE • 1711 W. NICKERSON ST., STE. D • SEATTLE, WA 98119 • (206) 284-6001 • FAX: (206) 284-5043



April 27, 2006

RE: Maritime Education Loan Program

Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

Ladies and Gentlemen:

The Inlandboatmen's Union of the Pacific supports the proposed Maritime Education Loan Program. It is vital to the interests of the United States that we maintain a vibrant and well trained merchant marine. This legislation will be one avenue toward that goal, by supporting current merchant mariners to maintain or upgrade their endorsements or licenses.

Respectfully,

Alan Coté
President
Inlandboatmen's Union

REGIONAL OFFICES

PUGET SOUND 1711 W. Nickerson, Ste. D Seattle, WA 98119 (206) 284-5040 FAX: (206) 284-5043	REGION 37 1711 W. Nickerson, Ste. D Seattle, WA 98119 (206) 284-5321 FAX: (206) 284-5043	COLUMBIA RIVER 2435 NW Front Ave. Portland, OR 97209 (503) 228-8500 FAX: (503) 225-9556	SAN FRANCISCO 450 Harrison Street San Francisco, CA 94105 (415) 896-1224 FAX: (415) 896-1225	HAWAII 451 Aiea Road Drive Honolulu, HI 96814 (808) 944-0811 FAX: (808) 944-8051	SOUTHERN CALIFORNIA 1511 N. Gaffey, Ste. A-B San Pedro, CA 90731 (310) 521-9000 FAX: (310) 521-9094	ALASKA Post Office Box 6300 Ketchikan, AK 99901 (907) 225-6360 FAX: (907) 225-8656	JUNEAU 3017 Clinton Drive, Ste. 201 Juneau, AK 99801 (907) 790-0644 FAX: (907) 790-9646
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WILMINGTON, 90744 • 533 N. MARINE AVE • (310) 835-6617
HONOLULU, 96813 • 707 ALAKEA ST. • (808) 533-2777

GUNNAR LUNDEBERG • PRESIDENT/SECRETARY-TREASURER

HEADQUARTERS: 450 HARRISON STREET
SAN FRANCISCO, CALIFORNIA 94105



April 13, 2006

Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

RE: Maritime Education Loan Program

Dear Sirs and Madams:

The Sailors' Union of the Pacific herewith expresses its support for the proposed Maritime Education Loan Program.

Today the U. S. maritime industry faces many challenges, one of which is the time and cost of certification as it applies to advancing up the maritime career ladder, commonly referred to as the "hawsepipe". The proposed legislation would go far in alleviating the barriers that discourage mariners who from upgrading their credentials.

To bar advancement is simply un-American. I urge your support of this program.

Sincerely,

GUNNAR LUNDEBERG
President/Secretary-Treasurer

Apostleship of the Sea of the United States of America

AOSUSA



A RESOLUTION REGARDING THE PROPOSED MARITIME EDUCATION LOAN PROGRAM

Whereas the Apostleship of the Sea of the United States of America, the Catholic ministry to the people of the sea, and the Catholic Mariners Professional association, meeting at its annual meeting at the Texas Maritime Academy in Galveston, Texas on April 28, 2006;

Whereas the AOSUSA acknowledges the important and vital role that the US Merchant Marine and US mariners play in the domestic and international transportation system.

Whereas the United States has established one national merchant marine academy, and six state-based maritime academies, with the exception of union based facilities such as the Harry Lundeberg School, there exist few training facilities for limited license mariners and unlicensed mariners;

Whereas many US merchant mariners find themselves trapped in their present license or rating because of the lack of funding for necessary training;

Whereas the implementation of the Standards of Training, Certification and Watchkeeping for Seafarers in 2002 created challenges for US Merchant Mariners and their employers to fund the new and ongoing mandated training;

Whereas the maritime industry faces many STCW challenges of which not the least is the time and cost of certification as it applies to mariners advancing up the maritime career ladder or "Hawsepipes";

Whereas the United States of America faces an aging pool of mariners, and many obstacles for young people to become professional mariners.

Whereas the proposed Maritime Education Loan Program legislation would go far in alleviating the current barriers that are discouraging incumbent mariners who wish to upgrade into a licensed position or higher unlicensed endorsement.

Be it resolved that the Apostleship of the Sea of the United States of America expresses its support of the efforts of the Pacific Coast Maritime Consortium, and its effort at enacting the proposed Maritime Education Loan Program.

Be it further resolved that AOSUSA will encourage its members throughout the United States to support this legislation by communicating to his or her members of Congress the organization's support of this proposed legislation.

Rev. Sinclair K. Oubre, J.C.L. President
1500 Jefferson Drive • Port Arthur, TX 77642-0646
Ph. (409) 985-4545 • Fax (409) 985-5945 • Email: aosusa@sbcglobal.net



**Passenger Vessel
Association**

901 N. Pitt St., Suite 100
Alexandria, VA 22314

Phone (703) 518-6005
Fax (703) 518-5151
Toll Free 1-800-807-8360

pvainfo@passengervessel.com
www.passengervessel.com

May 18, 2006

Subcommittee on Coast Guard and Maritime Transportation
Ford House Office Building Room 585
Washington, DC 20515

RE: Maritime Education Loan Program

Dear Madams and Sirs

The Passenger Vessel Association (PVA) is pleased to express its support for the proposed Maritime Education Loan Program.

PVA is the national trade association for the U.S.-flagged, U.S. Coast Guard-inspected passenger carrying vessel fleet. The Association has 425 vessel operating companies and 175 associate member companies that design, build, repair, equip, train the crews, and manage vessels.

PVA members are diverse. The vessel-operating companies include vehicular and passenger-only ferries, dining cruise, excursion, sightseeing, whale watch, eco-tourism, and overnight cruise vessels. They provide their services across the breadth and depth of the United States. They operate in major ports, river systems, lakes, bays and sounds including headwaters and remote waterways.

The domestic passenger vessel fleet includes several thousand small passenger vessels and two hundred plus passenger vessels, as defined in Title 46, *United States Code* section 2101(22) and (35).

The Passenger Vessel Association would like to express its support for the proposed Maritime Education Loan Program. The maritime industry faces many challenges of which not the least is the time and cost of certification as it applies to mariners advancing up the maritime career ladder or "Hawsepipes".

The proposed legislation would go far in encourage new mariners to consider our industry for their employment. We believe that finding, developing and retaining employees in the modern marketplace will be one of the biggest challenges for our members in the near future. This proposal will help the domestic fleet continue to grow our businesses by offering our mariners important assistance in the high cost of training and license attainment.

Sincerely,

Elizabeth J. Gadeny
Director, Safety, Security and Risk Management



May 31, 2006

RE: Maritime Education Loan Program
 Subcommittee on Coast Guard and Maritime Transportation
 Ford House Office Building Room 585
 Washington, DC 20515

Dear Madams and Sirs:

The Offshore Marine Service Association (OMSA) is the national trade association representing the owners and operators of U.S. flag vessels that work in the offshore oil and gas sector, both domestically and internationally. Our member vessels carry the supplies, equipment and many of the workers who make our offshore oil and gas industry possible. The majority of our members are family run businesses employing some 12,000 U.S. mariners.

The days when a mariner could manage their own career and learn everything they needed to advance have passed over the horizon like the schooner of old. The American merchant marine is facing a critical shortage of qualified mariners. As the workforce ages there are less and less personnel willing and able to advance to fill the highly skilled licensed positions. One key component of the current shortage is the significant cost of government imposed training and education required for a mariner to advance his or her career.

Our industry is one where a young person with only a high school education and a desire can begin a career working on the deck of a vessel and progress to vessel master earning well over \$100,000 per year. But where once only a strong work ethic could propel a young man or woman to a senior vessel position, today's situation is much different. Today's government mandated classroom training and education requirements may cost over \$50,000 for the classes alone, not to mention the additional cost of travel, per diem and time away from home.

OMSA would like to express support for a Maritime Education Loan Program. It is crucial that necessary monies are provided to mariners for education at local and regional institutions. The proposed legislation would go far in alleviating the current barriers that are discouraging incumbent mariners who wish to upgrade into a licensed position or higher unlicensed endorsement.

Respectfully,

K. B. Parris
 Vice President

OFFSHORE MARINE SERVICE ASSOCIATION

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Statement of

Cathy Hammond
Chief Executive Officer
Inland Marine Service
Hebron, Kentucky

On behalf of

The American Waterways Operators
801 North Quincy Street, Suite 200
Arlington, VA 22203
(703) 841-9300

Before the

Subcommittee on Coast Guard and Maritime Transportation

Committee on Transportation and Infrastructure

United States House of Representatives

October 17, 2007

Good morning, Mr. Chairman, and members of the subcommittee. I am Cathy Hammond, CEO of Inland Marine Service in Hebron, Kentucky. We are a privately held company in the marine business since 1981. Inland Marine Service is different from many companies in our industry because we don't operate boats or own barges; what we do is provide the personnel to operate inland towboats for our client companies. We recruit, train and dispatch the crewmembers for 19 boats operating on the Mississippi and Ohio River systems. Simply put, we're in the people business, and we thank you for holding this hearing today to focus on the personnel needs of an industry that is crucial to our nation's economy, homeland security, environment, and quality of life.

I am testifying this morning on behalf of the American Waterways Operators. AWO is the national trade association for the tugboat, towboat, and barge industry, which is the largest segment of the U.S.-flag domestic fleet. Our industry's 4,000 tugboats and towboats and 27,000 barges safely and efficiently move over 800 million tons of cargo each year, providing a safe, secure, low-cost, environmentally friendly means of transportation for America's domestic commerce.

Mr. Chairman, the tugboat, towboat, and barge industry provides family-wage jobs for more than 30,000 mariners in the brown- and blue-water trades. These hard-working, talented individuals are, quite simply, indispensable, both to our companies and to our country. Without the men and women who work as captains, pilots, mates, engineers, tankermen, deckhands, and cooks on our vessels, companies like Inland Marine Service would not be in business. Without the essential services provided by these crewmembers, shippers of petroleum, chemicals, grain, coal, steel, and a host of other commodities would be denied a safe, fuel-efficient, cost-effective means of transporting essential bulk commodities. As you well know, our nation's roads and rails today are already stressed to the breaking point; now more than ever, water transportation is an essential component of our national transportation system. If it weren't for the men and women who crew our vessels, our nation's transportation system would be crippled.

As you can probably tell, I love this industry, I believe in it, and I'm proud of it. The maritime industry generally, and the towing industry in particular, provides great opportunities for young people looking to start a career or other Americans looking to make a career change. Because of the current personnel shortage, vacancies exist in both the inland and coastal sectors of the business. A college degree is not required. A young person with a good work ethic who can pass a physical exam, security screen, and drug test can begin earning a living wage right away as an entry-level deckhand. Advancement is quick for motivated individuals willing to apply themselves. Additional responsibility and higher pay are there for those who obtain training and Coast Guard certification and licensing. Six-figure incomes and excellent benefits are achievable in a relatively short period of time for those with the motivation and skills to become pilots, mates, and captains.

Despite the attractiveness of the economic opportunities, however, it is clear that a career on the water is not for everyone. The work, especially as a deckhand, is physically demanding. In most segments of the industry, the job requires extended periods of time away from home. While "lunch bucket" boats that dock ships, fleet barges, or provide other harbor services typically operate on a daily basis and allow their crews to go home after each day's work, most mariners spend anywhere from 14 to 28 days at a time on a vessel, living and working on the boat, and then have 14 to 28 days off before their next trip. Separation from home and family is a reality for these mariners, and many newcomers to the industry find that this lifestyle simply doesn't suit them. The unique demands of the maritime lifestyle are a major reason why the turnover rate among entry level personnel in the industry is estimated to be 50 percent or higher each year.

Mr. Chairman, the towing industry, and I believe the domestic maritime industry in general, is facing a critical shortage of vessel personnel. This is a problem at two levels. First, we are having difficulty in attracting new people to the industry and convincing those who do give it a try to stay and make their career on the water. Second, we are

struggling to replace retiring captains and pilots and replenish critical wheelhouse positions. Because transportation demand in the industry is high at present – and that’s a good thing, to be sure – the personnel situation is even more challenging. Vessel utilization rates are higher than normal, and that also increases demand for crewmembers. Let me talk briefly about some of the factors that contribute to the shortage.

At the entry level, the challenge we face is not entirely different from the situation faced by other industries, such as long-haul trucking. The job is demanding, and being away from home for extended periods of time is simply not attractive to many young people these days. Moreover, unlike the trucking industry, which is visible to most Americans on a daily basis, the towing industry is often, despite our best efforts, invisible to potential applicants. There are plenty of potential crewmembers living in farm country or former factory towns who simply aren’t aware that our industry is there, much less know about the excellent career opportunities that it offers. We have to find creative ways to reach these people, and we have to realize that once we do find them, a fairly high percentage will not be interested in the kind of lifestyle that the maritime industry offers under any circumstances.

At the wheelhouse level, the problem is a confluence of generational change – the retirement of a large population of mariners who entered the industry in the early 1970s – and government policies and regulations that have made it more difficult to encourage younger crewmembers to stay in the industry and pursue a career as a captain, mate, or pilot. Licensing and training requirements for wheelhouse personnel have become more stringent, complicated, and expensive in recent years, and many crewmembers are discouraged by the longer time and the additional steps required to obtain a Coast Guard license. Others are scared off by the horror stories they hear from older mariners about delays and backlogs in the Coast Guard licensing process or physical and medical requirements that threaten to cut short their careers. And, in the post-September 11 world, many mariners feel disrespected and threatened by the increasingly suspicious and hostile way they are treated by government personnel. Some older mariners have chosen to retire early rather than continue to deal with these challenges; many younger mariners

are saying, "Why bother?" and opting not to pursue a wheelhouse career. This is a huge problem because now, more than ever, we need their services.

Addressing these problems and ensuring a supply of qualified, skilled personnel to crew our industry's vessels and meet the needs of America's domestic commerce must be a shared industry-government effort. For our industry, that work starts with recruiting. Companies are casting their net wider than ever in the search for new employees. It is not unusual to find a full time recruiter working in communities hundreds of miles from the river in an effort to find new sources of personnel. Companies are also working together to increase awareness of employment opportunities in the maritime industry. At the urging of its members, AWO recently created a recruitment "tool kit" for use by its member companies in their outreach efforts. (A copy is attached to my statement.) AWO also maintains a "jobs portal" on its website that links interested applicants to member companies and provides information about employment in the industry.

Recognizing the costs and the challenges posed by high initial turnover, companies have also become more selective about their newly hired employees. It is not unusual for a company to screen more than a dozen applicants for each new crewmember that they bring on board. Potential applicants are interviewed by experienced personnel who make sure that they understand the time commitments and lifestyle demands of a towing vessel career. Companies are modifying their orientation and training programs as well. In addition to safety and security training and explanations of company policies and procedures, many orientation programs now stress the career opportunities available and attempt to show employees how they can move up the ladder within the company.

Of course, the shortage of personnel means greater competition (both within the industry and with other industries) for the services of mariners, and this competition is reflected in the higher wages and improved benefits offered by companies today. In addition to increasing compensation, however, companies also put a premium on retention of personnel. They are implementing crewing procedures that emphasize stability and continuity. Greater attention is paid to crew comfort on the vessels and training is

provided to help on-board supervisory personnel become better managers and be more sensitive to the needs of new employees. These are excellent developments that make our industry a more attractive place to work.

The industry is also looking beyond the resources of individual companies to address the personnel shortage problem. Previous efforts involved things like participation in high school "career days" at schools located in river towns. Today, however, companies are joining together to help create training programs in high schools and other educational institutions to ensure that individuals obtain the basic skills needed and to assist with any government-required documentation that may be required, such as a merchant mariner's document (MMD) or Transportation Worker Identification Credential (TWIC). My towing industry colleague Jeff Slesinger, who will testify later today, describes an encouraging example of a business, education and labor partnership in Washington State. Until recently, the State of Ohio funded training programs in high schools throughout the state as well as adult education programs. Similar examples exist in port cities on the inland rivers and along the coasts, from New Orleans to Baltimore. Companies are also partnering with educational institutions to provide programs to assist with the education and training required for advancement to higher licenses. The Seaman's Church Institute, for example, maintains state-of-the-art simulator training facilities for both brown- and blue-water mariners at its facilities in New York, Houston, and Paducah, Kentucky.

Mr. Chairman, our industry recognizes the responsibility we have to attempt to make our industry as attractive as possible to current and prospective employees and to be creative in our recruiting and retention programs. But, there is a role for government -- both Congress and federal agencies like the Coast Guard and the Maritime Administration -- in solving this problem as well. We offer the following recommendations for government action.

First, Congress and the federal agencies should modify government policies and regulations that establish new barriers to entry for personnel looking to enter the maritime industry. The TWIC program is a particularly glaring example of this

problem. AWO has previously testified before this subcommittee on the need to establish a practical interim work authority provision that will enable a new hire to begin working on an interim basis before having to undertake what may be a long and burdensome trip to a TWIC enrollment center. Congressman Baker has authored an amendment to the Coast Guard authorization bill that would solve this problem without compromising security, and we urgently request your support for including such a provision in the manager's amendment to H.R. 2830 that will be considered on the House floor later this fall.

Second, as a related matter, **the Coast Guard should carefully review its protocols for interacting with vessel personnel and ensure that its stated objective of "honoring the mariner" is reflected in its dealings with the professionals who crew our vessels.** Routine interactions with vessel personnel should not be conducted in the same manner as "for-cause" law enforcement boardings. A heavy-handed, adversarial approach is distressing and demeaning to law-abiding mariners who have traditionally viewed themselves as partners with the Coast Guard in ensuring both safety and security on the waterways. As this Subcommittee continues to exercise oversight to ensure the focus and effectiveness of the Coast Guard's marine safety program, Congress can help to ensure that the agency makes the necessary changes to the way it interacts with mariners on the water.

Third, **the Coast Guard should make changes to its licensing system that eliminate obstacles to advancement while ensuring high standards of safety.** Congress should encourage the Coast Guard to move quickly to finalize a recent notice of proposed rulemaking that provides a pathway for licensed mariners from other segments of the industry to move into the towing vessel officer licensing path without having to start from scratch. Publication of that proposed rule was more than two years in the making; we can't afford to wait that long for a final rule. Congress should also encourage the Coast Guard to continue to work with industry to develop and approve training programs that allow for a reduction in service time for mariners who successfully complete such programs. In addition, Congress should maintain close oversight of the Coast Guard's

ongoing effort to reorganize and centralize its internal processes for the issuance and renewal of merchant mariner licenses and documents. While we are cautiously encouraged by the progress that has been made so far as four of the 17 Regional Examination Centers have transferred functions to the National Maritime Center, the problems caused by outmoded processes, huge backlogs, and lengthy delays are far from solved. Congress should closely monitor this ongoing process and maintain regular communication with industry to ensure that this much-needed reorganization is achieving its intended goals.

Fourth, the Maritime Administration should recognize the changing character of the domestic merchant marine and the fact that the majority of the on-board jobs in the U.S. maritime industry today are on so-called “small vessels” such as towing vessels. Too often, government publications describe the U.S. merchant marine in terms of the relatively small number of deep-sea ships sailing today, and suggest that career opportunities in the industry are reserved for graduates of the federal and state maritime academies or require a college degree. This narrow focus overlooks the biggest part of the story, which is that the tugboat, towboat, and barge industry is vital, growing, and full of employment opportunities for hard-working Americans. We need MarAd to use its resources to tell this important story. Congress can help by communicating to the agency its realization that the tugboat, towboat, and barge industry, and the maritime industry generally, are part of the “critical infrastructure” essential to our nation’s economic and homeland security, and ensuring that the agency tells that story clearly, effectively, and accurately.

Fifth, and as a related matter, Congress and the Maritime Administration should ensure that the U.S. Merchant Marine Academy modernizes its focus to reflect the changing character of the domestic fleet and help to prepare graduates for jobs in the towing industry. The academy is too small, and our industry’s need for personnel is too great, for this to be a solution to the problem in and of itself, but it can be a part of the solution. Where towing industry-focused programs have been instituted by the state maritime academies, they have been very well received by our industry.

Finally, the Maritime Administration can also play a role in helping companies and mariners to understand and tap into existing governmental resources or public-private partnerships for training and education. We suspect that there are many potential sources of funding and support for training and education that could be useful to mariners – if our industry were aware of them. Identifying potentially untapped funding sources and making sure that they are available to mariners and their employers could be another useful step in a multi-pronged approach to alleviating the vessel personnel shortage.

Mr. Chairman, it is true that there is no silver bullet, no single solution, which will solve the industry's personnel shortage and ensure the necessary supply of well-trained, well-qualified mariners to crew our vessels and meet our nation's current and future transportation needs. But, we believe the steps we have outlined in our testimony today offer a useful "work list" for government and industry to pursue together. Clearly, companies have a responsibility to make our industry as attractive an employer as possible for current and prospective crewmembers. We need to take the lead in finding and keeping the people we need to run our businesses. But, government also has an important role to play, first and foremost by eliminating government-imposed obstacles that make the job of attracting and retaining qualified crewmembers more difficult. If our industry can count on government to take these steps while we redouble our own efforts to improve our recruiting and retention programs, I believe we can make a meaningful difference in tackling an important and growing problem for our industry and our national transportation system.

Mr. Chairman, thank you very much for the opportunity to appear before you today. I would be pleased to answer any questions you or other members of the Subcommittee may have.

The American Tugboat, Towboat and Barge Industry:
A GREAT CAREER CHOICE

**Tugboat and Towboat Industry Positions
 and their Qualifications**



The tugboat, towboat, and barge industry offers many exciting employment opportunities working on America's inland rivers; the Atlantic, Pacific, and Gulf coasts; the Great Lakes; and ports and harbors around the country. A typical tugboat or towboat carries anywhere from three to 10 crewmembers and includes a mix of highly skilled, experienced personnel and entry-level deckhands.



The entry-level position on a towing vessel is called a **Deckhand** on inland towboats or an **Ordinary Seaman** on coastal tugboats. These crewmembers prepare barges for loading and unloading cargo, build tows and perform basic vessel maintenance and housekeeping duties. More experienced deckhands may be called **Lead Deckhands** (or **Mates** in the inland towing industry) and have leadership duties as well. Experienced **Ordinary Seamen** on coastal tugboats graduate to **Able Bodied Seamen**, or **ABs**. *On most towing vessels except those operating on rivers, deckhands require a Coast Guard-issued **Merchant Mariner's Document**, or **MMD**.*

The **Cook** buys and prepares food for the crew. Some cooks also work on deck between meal preparations, in which case they may be called **Cook/Deckhands**. *Cooks on towing vessels other than those working on rivers require a Merchant Mariner's Document.*

Tankermen work on towing vessels moving liquid cargo in tank barges, and are specially trained for the environmentally sensitive job of transferring oil or chemical cargoes between barges and tanks on shore. *Tankermen require an MMD with a Tankerman endorsement, which entails training and experience in handling liquid cargoes.*

The **Engineer** is in charge of the operation and maintenance of the boat's engines, machinery, and the barge cargo pumps. A **Deck Engineer** is an engineer who also performs deckhand duties. *Engineers are well trained, experienced personnel who may or may not be required to hold a Coast Guard-issued license, depending on the size and location of the vessels on which they work.*

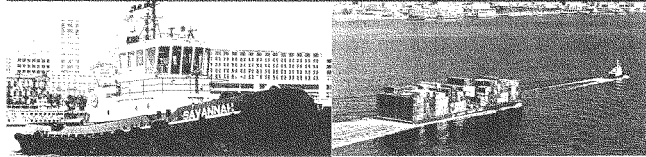
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Tugboat and towboat crews work varying schedules, but most crews live aboard the vessel for two to four weeks and then have one to three weeks off. In most segments of the towing industry, crewmembers stand two six-hour watches daily. Crewmembers on some harbor tugs go home at night and often work a single 12-hour shift.

The American Tugboat, Towboat and Barge Industry:

A GREAT CAREER CHOICE

Tugboat and Towboat Industry Positions and their Qualifications



The crewmembers who "drive" the towing vessel are the **Master** (or **Captain**) and his or her second-in-command, known as a **Mate** on coastal tugboats and a **Pilot** on inland towboats. The Master and Mate or Pilot alternate shifts navigating the vessel. The Master is the manager of the vessel, responsible not only for operating the boat safely and efficiently, but for managing the crew as well.

Nearly all towing vessel Masters, Mates, and Pilots started their careers as deckhands and worked their way into the wheelhouse, obtaining the necessary training and Coast Guard licenses along the way. Obtaining a Coast Guard license as Master of Towing Vessels is normally a three-step process requiring passage of a written examination, four years of experience, and a practical demonstration of navigation skills. An individual working his or her way up to Master first obtains an Apprentice Mate (Steersman) license – in effect, a learner's permit that allows for practice in the wheelhouse under the supervision of an experienced mariner. The next step is Mate (Pilot), and finally, Master.

Shoreside Positions

Tugboat and towboat crews are supported by staff on land as well. These shoreside positions vary widely by company, but below are a few of the more common ones.

The **Port Captain** works with the Captains to supervise and manage boat crews. Most Port Captains are former Vessel Masters.

The **Dispatcher** assigns boats to guide barges or ships, and also assigns crews to man the boats.

The **Port Engineer** is responsible for keeping boats and barges on a regular maintenance schedule.

The **Safety Manager** is responsible for the safety of the crew and vessel. He/She is in charge of training programs, vessel inspections and compliance with regulations.

The **Mechanic** performs inspections and repairs on the vessel, and reports to the Port Engineer.

Consider a rewarding career in the American tugboat, towboat and barge industry!

For more information, visit www.americanwaterways.com

The American Tugboat, Towboat and Barge Industry: A GREAT CAREER CHOICE

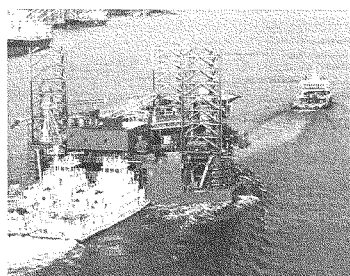


"Building a career in the towing industry is one of the best decisions I ever made. I advanced through the ranks and now pilot a modern towboat that can handle the biggest jobs. The pay and benefits are excellent and I like the flexibility of the lifestyle that allows me to spend extended periods of time with my family."

- Scott Stewart, Pilot
AEP River Operations
Chesterfield, MO

A career in the tugboat, towboat and barge industry offers great opportunities:

- Competitive pay and benefits
- A skilled profession that doesn't require a college degree
- An exciting alternative to a 9-to-5 job
- A chance to learn a trade
- Extended time off
- Opportunities for advancement
- Flexibility to live where you choose
- The rewarding experience of being part of a team
- Pride in being part of an industry that is vital to America



FACT:

Today's modern fleet of nearly 4,000 tugboats and towboats and more than 27,000 barges moves over 800 million tons of America's commerce each year.



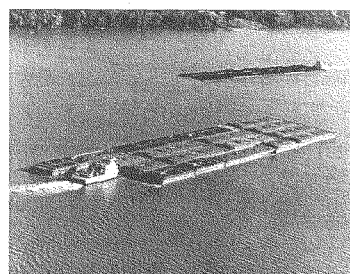
"This job is a real adventure. Every day is different and I enjoy being out on the water and among nature. I am a valued member of the crew because they respect my work skills and teamwork. I like the challenge of dealing with the elements of sea and sky to accomplish the job. It sure beats sitting at a desk from 9 to 5."

- Lauren Lahners, Deckhand
E.N. Bisso & Son, Inc.
Metairie, LA

Competitive Pay and Benefits:

Many companies offer excellent pay and full benefits, including:

- Health insurance
- Life insurance
- 401(k) Savings Plan
- Dental insurance
- Employee stock ownership
- Merit pay
- Vision care
- Employee Assistance Program (EAP)
- Long-term and short-term disability benefits
- Reimbursement for Coast Guard and company-required training



FACT:

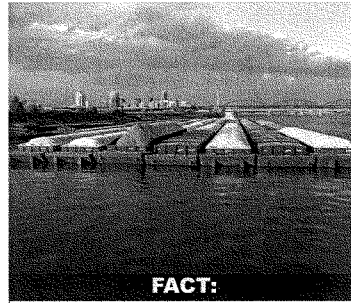
Tugboats, towboats and barges operate on America's 25,000 mile waterways network, a system that is the envy of the world.

The American Tugboat, Towboat and Barge Industry: **A GREAT CAREER CHOICE**



"This job allows me to have a lot of time off with friends and family. I like being an important part of a team, working together to get the job done. We take a lot of pride in that. The members of the crew are more like family than coworkers."

- Kenneth Brooks, Deckhand
McAllister Towing & Transportation
New York, NY



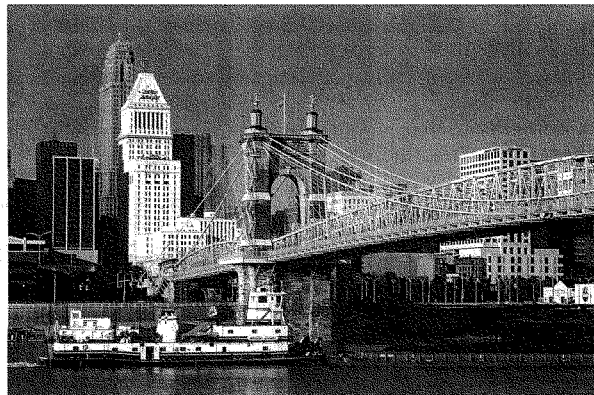
FACT:

Towboats and barges move over 60% of U.S. grain exports, helping American farmers compete with foreign producers in the world market.

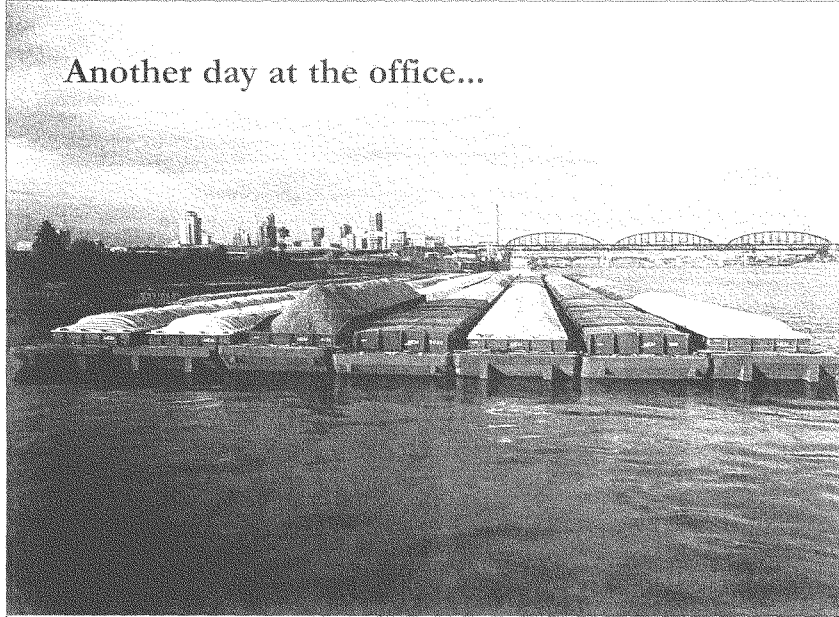
Entry level applicants must:

- Be at least 18 years of age
- Have two forms of ID, such as a driver's license and birth certificate
- Be a U.S. citizen or permanent resident alien
- Be able to read and comprehend the English language
- Pass a drug and alcohol screen
- Pass a security background check
- Pass a physical examination

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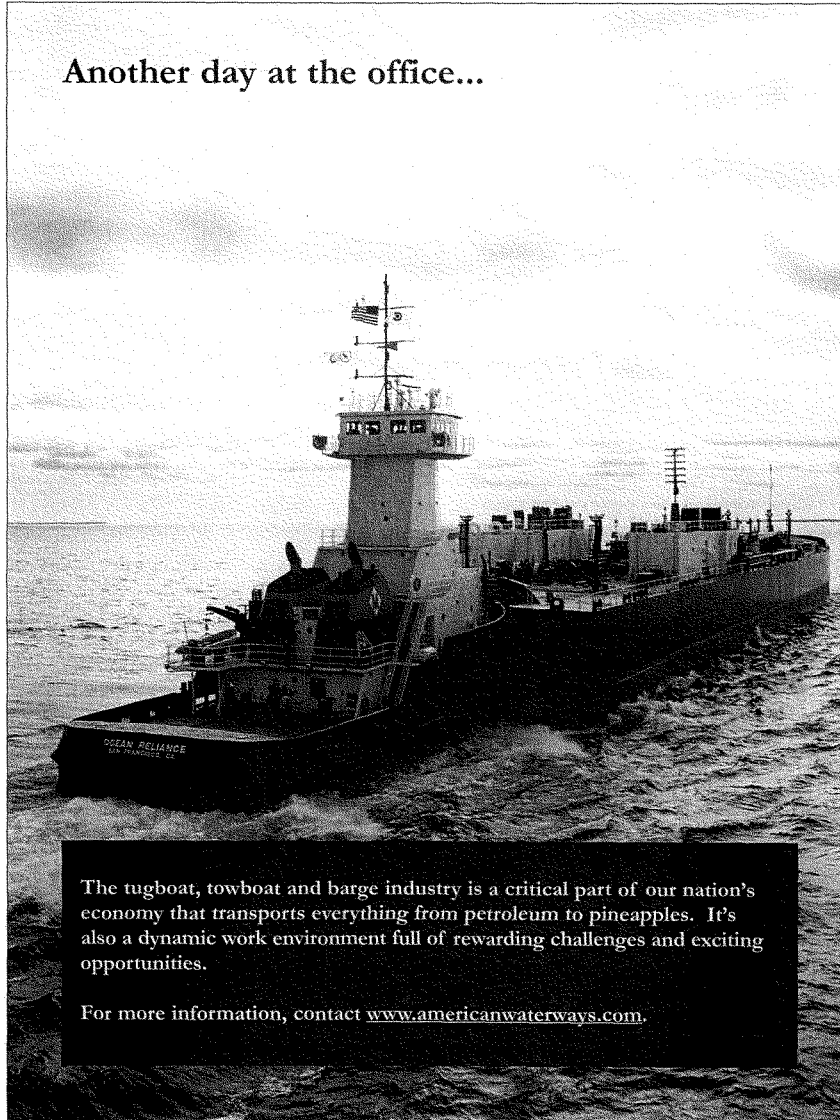
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**STATEMENT
of
MICHAEL J. RODRIGUEZ
EXECUTIVE ASSISTANT TO THE PRESIDENT
INTERNATIONAL ORGANIZATION OF MASTERS, MATES & PILOTS
to the
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
on
MARITIME TRAINING AND THE WORKFORCE
OCTOBER 17, 2007**

Mr. Chairman and Members of the Subcommittee:

I am Michael J. Rodriguez, Executive Assistant to the President of the International Organization of Masters, Mates & Pilots (MM&P). MM&P represents ships' Masters, other Licensed Officers and unlicensed mariners working aboard U.S.-flag commercial vessels in the foreign and domestic trades. MM&P also represents mariners working aboard civilian-crewed ships in the government's Ready Reserve and Military Sealift Command fleets, as well as harbor pilots in ports throughout the United States.

Thank you for the opportunity to present MM&P's views on the state of the Maritime Workforce in the United States.

I will begin my remarks by saying that we believe very strongly that America's mariners are an important national asset – an essential asset that our nation cannot afford to lose. As you, Mr. Chairman, and the members of your Subcommittee know, American mariners have, from the earliest days of our country, served with our armed forces. They continue this proud tradition today, serving in the Middle East by providing indispensable support for our troops. As Naval officers, many licensed mariners have performed on active duty at sea, ashore, and as harbor pilots.

American mariners also play an essential role in relief and humanitarian efforts. Following the attack on the World Trade Center, mariners evacuated thousands from Lower Manhattan. In 2005, they helped provide relief to victims of the Gulf hurricanes and to victims of the tsunami in Banda Aceh.

Mariners face many challenges. Some of these are part of life at sea and cannot be changed. Long separations from home and family, extreme working environments, and the dangers of the sea have always been accepted by the men and women who take up the



maritime profession. There are, however, other negative aspects to life at sea that governments and industry can manage.

MARITIME POLICY

A strong commercial merchant fleet that provides good-paying, attractive jobs for Americans is an essential element of our national defense. Without it our country will not have the U.S. citizen manpower to crew the Department of Defense's privately-managed and government-owned vessels called into action in time of war or other emergency.

Therefore, it is vitally important for Congress and the Administration to support the full funding of the Maritime Security Program because it serves to maintain vessels under the US flag and preserve the management and seafaring skills necessary to support the U.S. military.

Furthermore, we urge Congress to consider increasing the maritime security fleet from 60 ships to a greater number of privately-owned, militarily-useful, U.S.-flag commercial vessels to ensure an American presence in the world shipping markets and provide opportunities for American mariners.

The Jones Act is another vital component of a strong American merchant marine. The Jones Act reserves domestic trade for vessels owned by Americans, built in American shipyards, and sailed by American mariners.

We urge Congress to continue to fully support the Jones Act. Foreign access and control of our domestic trades would eliminate an important source of jobs for American mariners.

Our nation's cargo preference laws must be fully enforced. These laws provide an important source of cargo for U.S.-flag ships, encouraging their owners to operate under the U.S.-flag. Weakening or eliminating the cargo preference laws will reduce the amount of government guaranteed and taxpayer financed cargoes available to U.S.-flag carriers and drive vessels from our flag. Ultimately, the result will be the outsourcing of American maritime jobs to foreign seafarers.

Mr. Chairman, these essential maritime programs are the foundation of America's maritime policy and help ensure that our country will continue to have the U.S.-flag commercial sealift capability and U.S. citizen crews needed to support our economic and military security.

CRIMINALIZATION OF MARINERS

It is well known throughout the national and international maritime communities that the criminalization of seafarers is a recruiting and retention problem as well as a human rights issue. Seafarers are increasingly exposed to criminal sanctions as a result of industrial accidents occurring in the high-risk environment of shipping. There are many examples that I could cite in this context, but a recent one is particularly noteworthy.

In November 2002, the tanker *Prestige* began to break up off the northwestern coast of Spain. Captain Apostolos Mangouras reported to coastal authorities that his ship had been damaged. He sought refuge in a Spanish port but Spanish coastal authorities refused. The governments of France and Portugal also refused to grant *Prestige* refuge and the vessel

was forced out to sea. Ultimately, the ship was lost causing serious pollution along the Spanish and French coasts.

When Captain Mangouras reached the shore in Spain he was arrested and jailed. He was later released but forbidden to leave the country. He is now being held under house arrest in Greece pending the outcome of court proceedings in Spain which are delayed indefinitely for political reasons.

The international shipping community recognizes that mariners, who are subject to the laws of multiple jurisdictions, must be afforded special protections under uniform international standards. In fact, the International Maritime Organization (IMO), the United Nations organization responsible for the regulation of international shipping, has responded to the abuse of mariners following incidents like the *Prestige* by adopting *Guidelines on the Fair Treatment of Seafarers in the Event of a Marine Accident*. Presently, IMO is in the process of adopting the *Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Accident*. This code of practice is on track to become part of the Safety of Life at Sea Convention (SOLAS) and so will become binding on the nations that have signed the SOLAS convention. The United States is a party to SOLAS.

These recommended practices are:

1. Investigations should be based on the principle of determining lessons learned from the causes of accidents in order to prevent future accidents.
2. Seafarers' human rights, including the right to be informed of the nature of the investigation and the right to legal counsel, should be protected during accident investigations.
3. Seafarers should be informed of protections available to them to prevent evidence that they give being used against them by the investigating authorities.

We believe these principles to be in accordance with the basic human rights that should be afforded to mariners everywhere. Regrettably, however, these basic principles of fairness and human rights are not in force in every country.

Most regrettably, the United States opposes the basic principles of fairness and human rights when it comes to maritime accident investigations in the United States. At the recently concluded meeting of IMO's Maritime Safety Committee (MSC) held in Copenhagen, the United States opposed the Code saying that requirements for "individual legal rights and legal process" should be removed.

This is particularly disturbing when one considers that in the United States, maritime accident investigations and criminal investigations are the same. The Coast Guard, the investigating authority in the United States, is unwilling to fully inform mariners of the nature of the investigation and of their rights or that the information given by a mariner during an accident investigation could be used to prosecute the mariner.

We understand that aggressive prosecution and strong penalties for intentional criminal acts and resulting pollution make sense. Criminal sanctions offer the right deterrent and punishments.

However, the effects of the criminalization of unintentional acts of mariners involved in industrial accidents are counterproductive.

Criminalizing the acts of mariners involved in an accident: hinders accident investigators working to uncover the true cause of the accident, fails to address the root cause of the accident to avoid its reoccurrence, demoralizes the workforce, and discourages junior officers from seeking promotion to senior level positions. Finally, the threat of criminalizing accidents encourages experienced mariners to leave the industry and discourages new recruits from pursuing a career at sea.

We recommend that maritime safety investigations should be separate from, and insulated from, investigations that may lead to criminal prosecutions.

We also recommend that Congress should consider modifying 46 USC 6301, which governs investigations of marine casualties. The statute itself is punitive and in opposition to the international principles I mentioned. The law presupposes misconduct and so encourages the Coast Guard to be overly aggressive toward mariners.

To attract young people into our industry and to be fair to those who have dedicated their working lives to seafaring, we must stop treating our merchant mariners like criminals. A key first step towards doing this is to change 46 CFR 6301 by bringing the statute in line with the principles of the IMO standards and guidelines.

USCG MEDICAL POLICY

MM&P and many other organizations are deeply concerned over the effects of the Coast Guard's medical policy. The policy is to employ medical standards directly derived from the Federal Aviation Administration (FAA) without regard to their applicability to the maritime work environment and to centralize medical fitness decisions at the National Maritime Center (NMC).

Among our specific concerns are:

1. The application of medical standards that have been developed for airline pilots and not for mariners will jeopardize the continued employment of mariners who have spent their whole careers at sea.
2. The system is likely to reduce a mariner's ability to plan for a secure, long term career in the industry.
3. Some mariners will avoid seeking further evaluation and treatment for their conditions due to the uncertainty over the outcome of medical examinations and the possible negative impact upon their ability to continue employment.
4. The policy will require unnecessary medical consultations, evaluations and interventions for mariners who have successfully managed their medical conditions throughout their careers.
5. The policy will lead to increased costs for mariners, employers, and health care plans by attempting to mandate which medical tests are called for, in all cases, without regard to the individual medical factors present in each case.

6. The policy is not based upon demonstrated safety risks associated with the medical conditions that are being evaluated. The Coast Guard has not presented any safety data analysis which would justify the proposed complete overhaul of the medical evaluation process.
7. The Coast Guard has not presented a cost/benefit analysis of the potential financial impact upon the industry which might further impair the ability of the U.S.-flag maritime industry to compete.

MM&P strongly believes that the Coast Guard's medical policy should be supported by clear evidence after consultation with appropriate medical experts and analysis of the relevant medical literature and maritime accident statistics.

MM&P is pleased that the Coast Guard Authorization Bill for 2007 provides for a Merchant Marine Medical Advisory Committee. We feel, however, that more must be done in this area.

We strongly recommend that the USCG:

1. Use the recommendations developed by medical advisory panels from other transportation modes. For instance, the Federal Motor Carriers Safety Administration has a medical review process for commercial drivers. The aim is to develop evidence-based medical guidelines for particular medical specialties of concern (cardiology, neurology, pulmonary medicine, internal medicine). These recommendations could be adapted for use in the maritime industry.
2. Provide training and certification programs to medical examiners which will ensure consistency and accuracy of compliance with the recommended guidelines. Under such a system the Coast Guard would monitor compliance of examiners.
3. Adopt a system of medical review using the best practices of the United Kingdom and Australia, the governments of which provide job task analyses and clear guidance to participating medical professionals.

MANNING, WORKLOAD, STRESS AND FATIGUE

Mariners live where they work. The job is 24 hours every day of the week, in all conditions of weather. Aboard many vessels, mariners sleep only a few feet away from engine rooms, cargo spaces, and machinery. Accommodation spaces are often subject to noise, vibration, and exhaust emissions. Rest and access to leave ashore are essential toward maintaining a safe work environment and for overall health.

A recent study by the Cardiff Research Program, commissioned by the International Transport Workers' Federation, found that:

- one in four seafarers said they had fallen asleep while on watch;
- nearly 50% of seafarers reported work weeks of 85 hours or longer;
- mariners say their working hours have increased despite regulations to combat fatigue;
- almost 50% of seafarers believe their working hours present a danger to their personal safety;

- thirty-seven percent of mariners say their working hours posed a danger to the ship.

Stress and fatigue are serious problems in the maritime industry. Ships and other vessels operate around the clock. Minimal manning, fast turnarounds, foul weather, and long separations from home all combine to exert stress on mariners and deny them opportunities for quality, restorative sleep. In recent years, safety management regulations and security requirements have increased the mariners' workloads, often with little real benefit. In fact, much of a mariner's time is taken up producing paperwork.

Studies show that the effects of fatigue on a person's ability to function are comparable to the effects of alcohol. It is therefore ironic that many owners and flag states are working to ban or limit mariners' consumption of alcohol but have made little or no effort to address fatigue.

In the short term, the effects of stress and fatigue might be groundings, collisions or personal injuries. In the long term, the effects on mariners are poor health and reduced life expectancy.

Manning levels are clearly related to the issue of fatigue. However, manning levels are too often determined by taking into account only the technical characteristics of the ship (type of vessel, the degree of automation, and propulsion system). More attention needs to be paid to all aspects of a ship's operation, such as the administrative burdens placed upon crews in order to comply with U.S. and international regulations, trade route, cargo management, loading and discharging responsibilities, and cargo space and tank cleaning.

We recommend that the United States begin to treat fatigue as a serious health and safety issue for mariners.

We also recommend that manning level determinations should take into account the potential for fatigue. Regulations should remove the economic advantage of operating with the bare minimum manning.

We further recommend that the Coast Guard enforce hours of work regulations and support efforts at the IMO to develop international regulations for safe manning.

Finally, we recommend that maritime labor, the Coast Guard, and industry examine the manner in which fatigue is addressed in other modes with a view toward adopting best practices for the maritime industry.

THE INTERNATIONAL SHIP AND PORT FACILITY CODE AND MARINERS RIGHTS

Maritime security regulations have not only increased the workload on our mariners, they have resulted in dramatically cutting off the mariners' ties to shore.

Mariners live where they work. Therefore, it is essential that mariners, visitors, and representatives of mariners' welfare and labor organizations be allowed free access to shore leave and to the vessel. Unfortunately, in many ports around the United States, mariners, their labor representatives, and those who provide welfare services to mariners are denied access to shore or to the vessels under the pretense of maritime security.

The right to shore leave and access to visitors, labor representatives, and welfare providers is included in the International Ship and Port Facility Security Code (ISPS Code). Section 16.3.15 of the ISPS Code provides that an approved port facility security plan shall address:

"procedures for facilitating shore leave for ship's personnel or personnel changes, as well as access of visitors to the ship including representatives of seafarers' welfare and labour organizations."

The ISPS Code is part of SOLAS and is, therefore, a treaty obligation of the United States. Remarkably, when the ISPS Code implementing regulations were written (33CFR104 and 105), the word *"facilitate"* was replaced with the word *"coordinate"*. This change alters the wording of the regulation to a degree that enables terminals and port facilities to charge outrageous rates for "security escorts" or to deny altogether mariners' rights under the ISPS Code.

Denial of human rights in the name of maritime security runs counter to the very goal of effective security which is to provide security with as little intrusion into individual rights and commerce as possible. By continuing to deny mariners' basic right to shore leave and visitors, terminals and port facilities in the United States make it more difficult to attract recruits into our industry and retain the experienced mariners we have. These measures also invite other nations to retaliate against American mariners abroad.

We recommend that the Coast Guard be required to enforce the human rights provisions of the ISPS Code and withhold approval of port and facility security plans until such plans provide for the "facilitation" of mariners' access to visitors, shore leave, labor representatives and welfare providers.

TRANSPORTATION WORKER IDENTIFICATION CREDENTIAL (TWIC)

The members of this Subcommittee are well aware of the problems with the TWIC program. There are two issues that we believe most directly affect the maritime workforce.

First, according to the regulations, individuals who desire to enter or remain in the maritime industry will be denied the opportunity, at least initially, if they have committed one of the disqualifying offenses within the past seven years. Therefore, an individual who is clearly not a terrorism risk will, nonetheless, be forced to prove eligibility for a TWIC. It is not unreasonable to conclude that many of these individuals will leave the maritime industry rather than endure this bureaucratic exercise.

Second, the TWIC regulations allow each state, local government, and private facility operator to issue their own access control requirements. Potentially, each mariner could have to pay for and carry an access card for every facility at which their vessels call. A TWIC will not guarantee that a mariner will be allowed access to his vessel or access to shore leave.

Our position has been consistent—the TWIC must preempt all other access control requirements. Otherwise mariners will be subject to repetitive application procedures and background checks and to pay the costs for each of these requirements or be denied access to their vessel and to shore leave. The result will be to encourage mariners and other maritime workers to leave our industry.

We urge Congress and the Administration to keep in mind that the TWIC program will have an impact on our ability to attract and retain individuals for seafaring employment. Aspects of the program that go beyond the scope of what was originally intended as an antiterrorism measure impose unnecessary burdens on the maritime workforce.

We recommend that the Merchant Mariner's Document should be accepted as an access/identification credential for mariners. Port facilities should be required to accept the Merchant Mariners Document in place of a TWIC.

CONCLUSION

Shipping needs young, talented people dedicated to moving the industry forward. Young people bring vitality and new skills. They look at things with fresh perspectives. We need their energy to innovate and meet challenges as our industry moves into the future.

The United States must stop treating mariners like criminals, allow them to plan for a full career, and stop locking them down aboard their vessels. If we begin to manage and develop this national asset appropriately, we have a chance to compete with other sectors of our economy for the best and brightest of our young people.

Thank you, Mr. Chairman. I look forward to answering your questions.

Statement of

Captain Jeff Slesinger, Western Towboat Company
Chairperson
Committee on Strategic Planning
Pacific Marine Towing Industry Partners (PMTIP)
A Washington State Skill Panel

Before the
Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure
United States House of Representatives

October 17, 2007

"Working Together to Ensure Competent & Qualified Mariners in the Pacific Marine Towing Industry"

PMTIP**Testimony: Washington State Skill Panel**

Good morning Mr. Chairman and members of the subcommittee. On behalf of the Washington State skill panel I want to thank you for inviting us to speak about how we are currently dealing with the mariner shortage crisis in our industry with regards to training, recruitment and retention. We are proud of our achievements and attribute our success to a highly organized and coordinated nonpartisan multifaceted collaboration of industry and non-industry members. This was made possible through funding received from the Washington State Workforce Training and Education Coordinating Board.

My name is Captain Jeff Slesinger. As the Chairperson for the Committee on Strategic Planning, I have been elected by our skill panel, Pacific Marine Towing Industry Partners (PMTIP), to speak with you today. In addition to my responsibilities with the skill panel, I am also employed as a working Captain and full time Director of Safety and Training for Western Towboat Company, a family owned tug and barge company that has served the Pacific Northwest for over 50 years.

In September of 2005, our skill panel was formed to serve the marine towing industry by harnessing the expertise of leaders from business (50%), education (18%), labor (11%), and the local workforce and economic development (21%). Over thirty (30) participants make up our membership today.

Over the last two (2) years, our skill panel has developed two highly effective and efficient partnership model approaches designed to address training, recruitment and retention issues that face our industry. These best practice models have a record of demonstrated success. We are here to expand our partnership by requesting that federal resources be devoted to both continue and enhance this promising approach pioneered by our regional skill panel.

The first successful partnership model is the skill panel itself. The mission of our skill panel is to work together to ensure competent and qualified mariners in the pacific marine towing industry by:

- Forming a sustainable partnership;
- Working together; and,
- Sharing strategies to attract, train and retain personnel needed to fill the high-skill, high wage jobs immediately available within our industry.

Our objectives as a skill panel are aligned with the Washington State Workforce Training and Education Coordinating Board to provide:

- Workers with better skills, jobs, and career opportunities;
- Employers with more efficiency, less turnover, and higher profits;
- Common skill standards that meet employer needs;

"Working Together to Ensure Competent & Qualified Mariners In the Pacific Marine Towing Industry"

- Educational programs that address key economic clusters and offer on-the-job learning strategies;
- Local and state information about employers' skill needs;
- Policy recommendations based on real-time information; and
- Ongoing links between employers and the public infrastructure that prepares their workforce, to ensure the quality and adequacy of a skilled pipeline.¹

Together, we have identified major factors that create a demand for qualified mariners within our industry:

1. Growth within the industry. Shipyards are full throughout the world constructing Offshore Supply Vessels (OSVs), Crewboats, Anchor Handling Boats, Tugboats and Barges to keep up with business expansion and replace older vessels.
2. Aging Workforce. The average age of officers working in the workboat industry is approaching sixty (60) years old. More and more of the baby boomers within the industry are retiring and leaving the industry.
3. New Regulatory Training Requirements. New regulations set in place by the International Community and the United States Coast Guard have placed a tremendous amount of new training requirements on the industry. These new training requirements have severely restricted the ability of the incumbent worker to progress within their company². This "hawsepipes" career path, a person entering the industry on deck and working his or her way up to the wheelhouse, was the predominant career path in the towing industry.
4. Generational Factors. We are experiencing a shortage of young people interested in the marine towing industry and have yet to find a reliable means of connecting to the next generation of tugboat personnel.
5. Confusing or Incomplete Career Path. Those individuals that are interested in joining the industry do not have a clear coordinated career path to follow that lead to seagoing positions. Presently, we don't have a very good answer to the man or woman who is on the dock or riverbank and asks "How can I get a job on one of those tugs? What kind of training do I need and where can I get it?"

Some of the solutions we came up with as a skill panel include:

- Funding research through the University of Washington to collect and establish quantifiable data identifying current workforce trends and issues.

¹ <http://www.wtb.wa.gov>

² *Impact Study of STCW 1995 Amendments and 2001 USCG Towing Licensing Regulations on the US Pacific Northwest Marine Towing Industry Workforce*, Catherine Claiborne Research Assistant UW ADVANCE Center for Workforce Development University of Washington, 2006.

- Coordinating efforts with our national trade association, American Waterways Operators (AWO), to assist us, along with Admiral Salerno from the USCG to give some relief to the industry, by allowing “200 ton license” to “towing license” as an efficient and reasonable way to fill some entry level licensed positions.
- Continuing the development of objective simulation assessments for AB-Mate and Mate to Master positions.
- Continuing outreach efforts to partner with other organizations and companies to help create a clearer and more efficient pathway for potential employees to join the marine industry workforce³.
- Researching the feasibility of recruitment options, by directing our efforts towards USCG military personnel, who do not have the TWIC issue⁴.
- Developing business solutions by coordinating with partner company members, for example: cost reduction technologies to address physical fitness standards.⁵
- Developing a recruitment and retention portal resource website: www.workontugs.com to inform the public, especially our youth about the marine towing industry.
- Creating a regional Crew Endurance Plan and Crew Endurance Management System (CEMS)⁶ with training materials (now being reviewed by the USCG) that will provide industry regulatory oversight relief and enhance the health and safety of the crew.
- Garnering legislative champions for the marine towing industry by demonstrating that it is a safe, environmentally responsible and gainful employment industry.
- Continuing with outreach and marketing programs to overcome the difficulty of hiring individuals from the maritime academies.⁷
- Supporting and assisting innovative solutions such as the Pacific Maritime Institute’s (PMI) Apprenticeship 2-Year Mate 500-1600 Tons Program to fast track new recruits from unlicensed to licensed positions.^{8,9}

³ Plenty of people who want to become mariners but there are barriers to career pathways. Source: PMI’s feedback on interested potential candidates for their Apprenticeship 2-Year Mate Program.

⁴ Increased federal regulations (USCG) hindering recruitment efforts, for example: TWIC (Transportation Worker Identification Card), which is tied into homeland security, is a 60 day application process, similar to the passport.

⁵ Other obstacles furthering the delay process for potential employees in the maritime industry will be one licensing center, located in West Virginia, versus regional licensing centers around the country to process requests and new proposed physical standards. Source: Industry skill panel members voicing concerns over the proposed one licensing center.

⁶ <http://www.uscg.mil/hq/gm/cems>

⁷ *Impact Study of STCW 1995 Amendments and 2001 USCG Towing Licensing Regulations on the US Pacific Northwest Marine Towing Industry Workforce.*

⁸ Large demographics of qualified licensed mariners are retiring in combination with a decline of 500 and 1600 Gross Registered Ton (GRT) licensed officers for towing vessels (operating on Near Coastal / Ocean Waterways) by approximately 95% over the last five years. Source: United States Coast Guard (USCG) Licensing Database.

Testimony: Washington State Skill Panel**PMTIP**

- Developing a business vision and plan to ensure stability and long term sustainability of our skill panel that effectively and efficiently address regional and national marine towing industry related issues.

When searching for solutions, we identified many ongoing regional training programs that have skill panel representation. Some of these programs include:

- The Youth Maritime Training Association (YMTA) – Career and technical education programs in Washington State high schools <http://www.ymta.net>
- The Workboat Academy – “Finding, Training and delivering Qualified and Competent Mariners to the Workboat Industry” <http://www.workboatacademy.com>
- The Seattle Maritime Academy – A division of Seattle Central Community College offering on-board training and education (SCCC) <http://seattlecentral.edu/maritime/institution.php>
- Alaskan Native Employment Initiative - Award-winning training and employment project in Alaska to hire youth for careers aboard U.S.-flag commercial vessels
- Transportation Institute, Pacific Coast Operations – “Transitioning Foster Youth into Maritime Careers” <http://www.trans-inst.org>

The second successful partnership model is a vocational apprenticeship program approach. The biggest issue we face as an industry is supporting our existing and future workforce needs based on our current work, regulatory and socioeconomic environment.

Prior to the adoption of the International Maritime Organizations (IMO) Standards of Training, Certification and Watchstanding (STCW), there were approximately three weeks of required training from Ordinary Seaman to Captain. Under the new regulatory environment, that same individual is faced with approximately twenty three (23) weeks of classroom instruction to achieve the same USCG Certification.

The typical mariner works six (6) to seven (7) months per year away from their family. For many new and incumbent mariners it is a hardship and financial burden to take the necessary time off to meet these new training requirements and support their family.

⁹ Currently a typical AB in the United States has to: pay out-of-pocket a total cost of \$16,000 for training to become an Officer-In-Charge; attend one of three approved schools spread throughout the country in Florida, Ohio, and Washington states; and, has only sixteen weeks of time off per year to complete twenty weeks of training. Source: *Impact Study of STCW 1995 Amendments and 2001 USCG Towing Licensing Regulations on the US Pacific Northwest Marine Towing Industry Workforce*, Catherine Claiborne Research Assistant UW ADVANCE Center for Workforce Development University of Washington, 2006.

In order to provide opportunities and facilitate entry and advancement at all levels within the maritime industry, we need to work together to establish clear career pathways for individuals that are new to the industry as well as incumbents looking for a method of advancement.

Currently, the Maritime Academies provide a pathway to Third Mate Unlimited and Third Assistant Engineer that has been proven to be very popular. The academies offer an excellent career path to individuals seeking a four (4) year college degree along with their maritime training. However, many mariners seek opportunities in the towing industry, in part, because a college degree is not required for career advancement. An Academy approach may not be appropriate for these individuals. Another, complementary career path is needed for these prospective mariners.

As an alternative, a new vocational program was developed for the marine towing industry by the Maritime Institute of Technology and Graduate Studies / Pacific Maritime Institute (MITAGS/PMI) with support from our skill panel. This apprenticeship style approach has been adopted by fourteen (14) towboat and OSV companies, attracting hundreds of individuals to the maritime industry. This program provides a defined career pathway to the level of Mate 1600 Tons Near Coastal / Ocean.

The Seafarers International Union's (SIU) Paul Hall Center for Maritime Training and Education also offers successful apprenticeship Deck, Steward and Engine Department programs.

We have identified several key components of a successful apprenticeship model:

1. First, there is an equal balance between learning on-the-job and in the classroom.
2. Second, there is a partnership between industry and maritime training institutions.
3. Third, and this is key, there is a recognized, common performance standard that is accepted by all the key parties:
 - a. the USCG is the certifying organization that establishes the standard; and,
 - b. the industry in partnership with the marine training institute establishes acceptable performance measures required to meet that standard.
4. Fourth, there are effective retention tools built in, including financial incentives for 3- 5 years of good, competent, post program employment.
5. Finally, there is a 3:1 reduction of sea time. At the end of the process, we have an individual who is confident in their skill set because they have already been put to work in an on-the-job environment; this "apprentice" truly knows the requirements of their job.

The common denominator for success in all of the vocational apprenticeship training models, we found is company participation. In the successful models, companies agree to take cadets (student observers) aboard and by doing so have provided a very effective and efficient pathway for individuals seeking a position onboard boats.

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At the end of the apprenticeship program: the individual is confident in their skill set because they have already been put to work in an on-the-job environment; the USCG (certifying body) is confident that the mariner has met not just the certifying standard but the intent of that standard; the companies are confident that their employee has been trained to meet the skills set for the job they are hired to perform; and, the local communities have gained a productive citizen who is contributing to the economy with their family wage job and providing a critical link to our transportation infrastructure.

The strong participation within our Washington State skill panel places us in a unique position to help build a national model between existing training organizations that will allow current and future mariners the ability to matriculate academic competencies and credentials seamlessly between billeted positions.

With your help, we can realize our future goal to build a nonpartisan *Marine Towing Technology & Career Center* to meet the needs of these individuals wanting to embark on careers in the towing industry, both Ocean/Near Coastal and Inland, and for the companies that hire these individuals by:

1. Using and expanding the Apprenticeship Model based on current successes and feedback loops.
2. Working with established Department of Labor Apprenticeship Models within the industry.¹⁰
3. Working with established maritime schools, vocational training centers, industry and subject matter experts to develop standards of apprenticeship for all deck, engine and steward positions aboard a vessel.
4. Identifying and coordinating resources to streamline processes.
5. Providing a passport-able and seamless process for individuals wanting a career in the maritime industry.
6. Providing organized outreach efforts and resources to assist companies in recruitment efforts.
7. Promoting the use of distance learning, enabling students to take courses through the use of media technology such as videos, teleconferencing computers, and the Internet.
8. Developing training programs conducted jointly with the Department of Defense to meet the needs of Maritime defense contractors and the Military Sealift Command.
9. Providing services to address Maritime recruitment and training of youth residing in targeted high poverty areas within empowerment zones and enterprise communities.

¹⁰ Currently the occupations which are apprenticeable are Able Seaman and Officer in Charge of a Navigational Watch.

10. Providing retention tools to maritime companies.
11. Developing and modularizing curriculum, learning guides, assessments and on-board training record books to meet established Apprenticeship Standards at all billeted levels.
12. Developing a secured web-based server for employees, companies and agencies to access training and competency records for an individual.
13. Building a “brick and mortar” infrastructure and framework to house this concept approach.
14. Providing curriculum, guidance and articulation agreements to any and all qualified educational centers that are willing to meet the standards.
15. Providing a sustainable funding source through grant mechanisms, scholarships, private and public contributions and loan programs to provide a career path.

By working together toward common objectives, we can continue to identify current and future workforce needs, and design creative and innovative solutions through education and training opportunities to ensure a “rising tide floats all boats”. We will provide the highest number of good jobs that pay wages that can support a family, offer benefits, such as healthcare, and provide opportunities for advancement.

Our partnership will continue to:

- Provide regional innovative solutions with national application to close skill gaps.
- Ensure competent and qualified mariners in the marine towing industry.
- Continue outreach efforts to collaborate with other skill panels in the same industry.
- Bring together partners to support entire career pathways.
- Focus on apprenticeship programs, financial assistance for incumbent workers, and high wage earnings for minorities and/or individuals who do not have postsecondary educations.
- Address workforce challenges by strategically aligning ourselves with local, state and federal workforce and economic development organizations to reach all individuals who wish to pursue a career in the marine towing industry and assist in educational efforts as well as creating a clear path for accomplishment.
- Develop special training projects that promote and enhance a safety culture within our industry and to efficiently and effectively satisfy regulatory requirements.
- Promote the benefits of our industry to garner public support to ensure a strong labor force of competent and qualified mariners.¹¹

¹¹ The marine towing industry is gainful employment, providing good paying jobs to people without a college education. The average starting pay for an unlicensed individual is \$15.00 an hour; \$27.50 an hour for licensed. Source: *Impact Study of STCW 1995 Amendments and 2001 USCG Towing Licensing Regulations on the US Pacific Northwest Marine Towing Industry Workforce*.

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- Create, support and expand innovative programs like the PMI Apprenticeship Mate program to all marine towing positions, which will increase our labor pool, therefore increasing revenue generated locally.
- Coordinate regional training resources and funding to address the current workforce's immediate and high priority training needs.
- Coordinate to develop matriculation through a regional curriculum approach offered in the High Schools, Apprenticeships, Internships and Job Corps in our region.
- Provide feedback loops for continual improvement.
- Provide an infrastructure to operate and sustain our efforts.
- Seek funding sources.

Mr. Chairman and members of the subcommittee, we very much appreciate the opportunity to appear before you today. Our skill panel stands ready to work with this committee to:

- Ensure clear pathways are created for qualified individuals seeking a career in the maritime industry;
- Man our boats competently and safely;
- Provide a critical segment of our transportation network;
- Insure the viability of essential commerce; and,
- Provide high-skill, high wage jobs that will support families and the economy of our local communities.

Thank you.

**TESTIMONY BEFORE
THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON COAST GUARD AND MARITIME
TRANSPORTATION**

**Primary and Secondary Maritime Education in America
“Onboard to a Future Career”**

October 17, 2007

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Mr. Chairman and distinguished members: it is a great pleasure to appear before this committee. As a second generation mariner, whose father served in World War II and who has worked in the marine industry his whole life, I have witnessed and felt first hand the effects of America's decline as a ship building and ship operating nation. As the focus of this hearing is the shortage of trained mariners, I must admit I find this heartening.

If the shortage of mariner's, and increasing wages are signs, then hopefully the decline of the maritime industry may be nearing an end and employment opportunities are on the upswing in this industry so critical to our nations security. The maritime higher education (collegiate) and professional (union/employer) system in the U.S. is the finest in the world and enrollment is up at all of the schools. As is the case with so many of our American enterprises, foreign nations have noticed and are copying our system of maritime education and are employing graduates of this system. As is the case with any successful endeavor, be it sports, business, entertainment or the military, the success of that enterprise ultimately comes down to attracting well trained, conscientious, talented individuals. The maritime industry is no different.

I am going to discuss maritime education at the entry and crew level where the greatest shortages exist and appear to be growing. The reasons for the shortages are complicated and as my time is brief I will try to summarize from my personal experience and results of my research. I will do this in five sections as follows:

- Maritime Secondary Education (Historical)
- Current Issues and Problems with Manpower
- Maritime Primary and Secondary Education (Current)
- Outcomes of Maritime Education
- Maritime Education Assistance

Maritime Secondary Education (Historical)

Most people are familiar with the image of the cabin boy serving tea to the Passengers on the "TITANIC" or the powder monkey passing shot to the gunners in movies such as "Master and Commander". These are accurate portrayals of how marine education had been conducted for hundreds of years. It was very much a hands on experience, learned aboard ship for all officers and crew.

The picture began to change in the late 1800's with the opening of the U.S. Naval Academy 1850's and opening of the first civilian maritime school in New York City. The New York Nautical School was open aboard the USS St. Mary in 1874, followed by school openings in Philadelphia in 1889 and Boston in 1891. During this period, ships were evolving from sail to steam and becoming more sophisticated. A number of accidents indicated a need for a better method of mariner training than the traditional on board apprentice approach provided. This is an important point to remember in that it is extremely relevant to the education of mariners today that also needs to evolve.

This system to educate the officers remains in place today with additional schools opening in the 20th century in California, Texas, and Michigan. The federal government opened the U.S. Merchant Marine Academy at Kings Point in 1941. The education of unlicensed

seamen (crew) was done on the job in the traditional manner of the ships apprentice up until the outbreak of World War II. The requirements for large numbers of trained mariners necessitated a quicker method than the apprentice model provided. As a result of the war a number of seaman training centers were open around the country. These centers were closed after the war.

In 1946, the War Shipping Administration transferred the Liberty Ship "SS John Brown" to the New York City Board of Education. The "Brown" served as a vocational high school until 1982. In a period of 36 years, over 5000 young men, in addition to receiving a high school education, acquired maritime training in the deck, engine and stewards departments. Many of these graduates went on to a career at sea, in the navy, shoreside maritime industry or attended a maritime academy.

In 1966, the Marine Engineers Beneficial Association (MEBA) opened a school in the Southern Hotel in Baltimore, MD. The program designed for high school graduates trained third assistant engineers in an apprentice program of formal classroom education and time as an apprentice at sea. This was a 3 year non-degree program in contrast to the 4 year degree programs offered at the state and federal academies. The school produced over 2,035 graduates from 1966 to 1986, the year it closed.

In the 1967's, the Seaman's International Union (SIU) created the Paul Hall Center for Maritime Training in Piney Point, MD. Attached to the center is the Seafarers Harry Lundeborg School of Seamanship that trains entry level seaman. The school enrolls high school graduates between the ages of 18 and 30 and puts them through an apprentice program to qualify as entry level seaman in the deck, engine and stewards department. The program consists of classroom training as well as shipboard training. The school has trained over 21,000 graduates and remains in operation today.

In addition to the Maritime Academies and Lundberg School, all of the maritime unions, MEBA, SIU, AMO and MM&P operate state of the art training facilities supported by their contracted shipping companies. These schools provide continuing education and upgrading courses for the union's members.

The preceding was a brief summary of Maritime Education in the United States at the secondary and post secondary level.

Current Issues and Problems with Manpower

The problem with a shortage of mariners has been increasing over the last few years. There are many reasons for this situation that many of my colleagues here today have covered in depth. I will restate them briefly since they will still remain issues for the foreseeable future to any individual considering a maritime career.

Ageing Workforce

Historically, the maritime industry has been cyclical; unfortunately conflicts are good for the merchant marine. During World War II, Korea and the Vietnam War there was a large influx of mariners and increased shipping with a small spike in the first Persian Gulf War in 1991. These mariners are gone or are rapidly leaving the industry. They were also primarily deep sea mariners versus brown water or coastal mariners where the shortages are now developing.

Compensation

The composition of the mariners has not kept pace with and has actually declined in comparison to many industries. As an example, in 1974 a seagoing marine engineer made 3 times the salary of a shore side engineer. Today these engineers may earn almost the same pay with a small premium being paid for going to sea of 10-20%. The seagoing engineer has less chance of upward promotion and compensation growth in addition to being away from home 6-7 months a year.

Another result of the years of depressed shipping of 1970 and 1980's is that many graduates from the maritime academies had to seek employment in shoreside industries. Employers were quick to recognize the outstanding education and abilities of these young men and women with this unique education. These same employers went back to the source of talent and as a result, these schools have a near 100% employment record for their students by graduation. The many shore side opportunities, has made seagoing employment less attractive.

Documentation & Renewal Requirements

The International Standards of Training and Watch Keeping (STCW 95) came into effect in 2000. In addition requirements for drug and alcohol testing, medical standards and the post 9/11 security requirements have all had their affect. While no one is arguing that better training, drug and alcohol testing, medical standards and security are not important, they have all placed additional financial and administrative burdens on the mariner. I have heard time and again the same reply from mariners when asked if they are going to renew their documents; "No" that they are not because of too much paper work and high costs.

Maritime Heritage

This issue is the least talked about and the most overlooked. This is one area I believe we can address and correct through public awareness. The American public has largely forgotten that we are an "Island Nation" dependent on waterborne commerce for our daily needs. Most people are unaware of how far that camera, bottle of wine or pair of pants had to travel to arrive on their store shelf.

Traditionally, America's seafarers came from countries or families with a seafaring tradition. These area's typically included Europe, the Caribbean or certain regions of Africa, Asia or the Pacific. At the entry mariner level, they were often 1st generation immigrants.

Immigration policies of the 1990's and security concerns and requirements for mariners to have citizenship have all reduced this supply of individuals.

The cyclical nature of shipping, declining wages and separation from home has not stimulated mariners to pass the "Sea-going Tradition" on to their children. Attend a maritime academy alumni or union meeting and ask by show of hands how many attending have children following in their career path the number is low.

I believe we need to create a new generation of mariners, if not from immigrants or the children of mariners then from a new source of individuals through education and awareness. That group is the underserved urban students from our cities. A maritime education can provide the gateway to career that offers steady employment, excellent pay, further education and a solid future.

Primary and Secondary Maritime Education (Current)

In 2001, the Maritime Administration recognized that a shortage of mariners was starting to develop. A conference was sponsored by MARAD and the U.S. Coast Guard entitled "Maritime Careers Creating an Action Plan for Recruiting and Retaining American Mariners". The conference was held at the U.S. Merchant Marine Academy. Among the topics examined was "Public Education and Awareness of the Maritime Industry". A follow up meeting on implementing action plans was held in 2002.

Since those meetings, unknown to many in the industry the seeds sown have taken root and are flourishing maritime institutions at the primary and secondary education level have begun to educate and graduate a new generation of mariners from our urban cities.

The process of maritime education has come full cycle and these programs have the look and feel of their predecessors, the New York Nautical School of 1874 aboard the St. MARY and the New York City High School of 1946 operating aboard the "SS JOHN BROWN".

Since 2003, I have been involved as a founding board member of a maritime charter school in Philadelphia. The school opened with 125 students and has expanded to over 700 students it will graduate the first seniors in 2008. In addition to this experience, I am completing my Ed D at the University of Pennsylvania Graduate School of Education. My research and dissertation is on and titled "Maritime Tactile Education for Underserved Urban Students in America", "Sailing to Success". The result from both of these projects is that I have had the opportunity to both participate and conduct research on the various maritime programs that are developing across the United States.

At the present time, there are approximately 16 marine or maritime themed, elementary, middle and high school open or opening in the United States. The average size of the schools is around 350 students. These schools are located around the country in major U.S. ports on the Atlantic, Gulf and Pacific Coasts as well as on the Great Lakes.

There is a difference between marine and maritime which is often confused. The marine schools have programs that deal with oceanography, biology and marine sciences. These schools have generally been in operation since the 1990's.

The maritime schools deal with subjects, training and skills required to work as a crew member on a documented vessel. In addition, there are several that offer training to work in the maritime industry ashore such as a marina, shipyard or at a port facility. In addition to these high schools, several community college and industry sponsored vocational schools have opened with programs for high school graduates. The schools all vary greatly in structure. I have grouped them together by several distinct classifications as follows:

Program Style: This deals with the manner in which marine or maritime material is presented to the students.

- 1) Integrated: This is what I call the "Song of the Sea". The material is integrated into all state required courses where possible. As an example, in 5th grade, the arrival of the pilgrims is covered in the American Government curriculum. The Pilgrim's vessel "MAYFLOWER" is mentioned and that is usually the last the students hear of her. In an integrated curriculum such topics as navigation how they found their way here, how did they live aboard ship, etc are expanded upon. Another example is in American Literature a novel such as Dana's "Two Years before the Mast" or Melville's "Moby Dick" may be substituted for a more traditional novel. In math classes navigation examples can be used to illustrate basic mathematic principals. The purpose of integration is to make students aware of the maritime history of our country and to get them familiar with nautical terms and customs, bearing in mind these are mostly urban students with little or no previous marine exposure. This approach will serve to open their minds and make them receptive toward considering a maritime course of study in the higher grades.
- 2) Vocational: The employment in various maritime industries requires specific USCG documentation that of itself requires specific training or sea service. The training must be Coast Guard approved as must be the instructors. The schools that offer this type of training to their students will prepare them to obtain the proper documentation prior to graduation, and to go to work upon graduation on a vessel or for a marine employer ashore.
- 3) Apprentice: These programs are similar to the vocational but they require in addition to course work, a period of time be spent at sea or working with a maritime employer. These programs exist at both the high school and post secondary education levels.
- 4) Academic: These programs are the most similar to traditional high school programs they provide a strong academic base in math and science required by the maritime colleges or service academies. In addition students take electives in navigation, seamanship or engineering. This program will give the students a leg up at college on classmates who are only being introduced to these maritime subjects at the collegiate level. This approach will provide urban students breathing room to concentrate on math and science courses, areas that they often struggle with.

Program Type: There are several specific program types that are in use in various parts of the country, schools may use a mix depending on the interest and employment opportunities available in their region or city.

- 1) General Maritime Studies: Provides a broad overview of the various marine, maritime and intermodal careers. These programs are designed to spark an interest in the students to prepare themselves for entry to a specialized academic program upon graduation at a community college, vocational school or maritime college.
- 2) Industry Specific: A particular industry i.e.: fishing, marina, or tug-barge operator may become involved with a school and sponsor/conduct specific training required for employment with that industry.
- 3) Company Specific: A particular company, as an example; Northrop Grumman which has a program with their Newport News Shipyard. The company may set up an apprentice program in the region or with a specific high school. The program will usually qualify students for entry to the shipyards apprentice program after graduation or for employment with that company.
- 4) Regional: A program may be set up by a local university, state or federal agency the offers material to all regional schools to use. This material would provide information about maritime history, the environment and transportation. An excellent example of this is the program developed by the Great Lakes Maritime Research Institute www.glmri.org

There are a variety of marine and maritime schools that have opened in many cities around the country these schools follow one or more of the program styles or types that I have identified, a detailed list is provided as Appendix (1).

The following schools offer examples of some of the various styles and types of programs I am researching.

New York Harbor School (Grades 9-12) Brooklyn New York

Started in 2003 the school is a part of the N.Y. Department of Education. The school was initially funded by "New Visions for Public Schools" this non profit group attracts foundation money to start small theme based schools. There are currently 96 new vision schools in New York City. The school is one of four theme schools housed in an existing city high school in north central Brooklyn an economically depressed area. The school demographics are 50% African American and 50% Hispanic. The school has a relationship with South Street Seaport Museum located on the Manhattan waterfront and uses their facility for on water training as well as the museums sail training vessel. The school has also developed a partnership/mentoring program with SUNY Maritime College in the Bronx. The college provides maritime course material, visiting instructors, and various academic and leadership opportunities to the school. This year two of the first graduating students of the Harbor School are attending maritime college. Plans are being developed by the school to move to vacated USCG facilities on

Governors Island in the future. Additional information on the school can be found at www.nyharborschool.org

Palm Beach Maritime Academy (Grades K-8) West Palm Beach Florida

Started in 1999 the school is a primary school grades K-8 with 400 students. It is a charter school that is tuition free and operated by the Palm Beach Maritime Museum, under a performance contract with the local school district. The school's focus is on maritime studies, science and technology. Character education and life skills are also an integral part of the curriculum. The former USCG facility on Peanut Island is used for training along with various historical facilities operated by the museum. The school has a uniform policy and a unique requirement that parents of students attending invest a minimum of 20 volunteer hours with the school. In 2006 the school was one of only 28% of state schools to earn an "A" for achieving Annual Yearly Progress (AYP) under "No Child Left Behind" legislation. Additional information on the school can be found at www.pbmm.org

Maritime Academy Charter High School (Grades 5-12) Philadelphia Pennsylvania

This school opened in 2003 with 125 students grades 5-7 in temporary facilities; in 2006 it moved to a permanent location at the Army's former Frankfort Arsenal site. The school presently has over 700 students' grades 5-12 with the first class graduating in 2008. Its demographic mix is 70% African American and the balance a mix of Latino, Caucasian and Asian students. The school operates as a traditional middle and high school, in 2007 the school made AYP for the first time. Currently the middle and high school the programs under development are both themed for the lower grades and general maritime studies for the upper grades. The school is developing a model apprentice program with K-Sea Shipping a national tug and barge operator, and a partnering/mentor program with SUNY Maritime College. The long term plans include a program of maritime studies that offer vocational, apprentice and academic tracks as an option for students. Additional information on the school can be found at www.maritimecharter.org

Bayfront Center for Maritime Studies (Grades K-12) Erie Pennsylvania

This is a non profit community based organization opened in 1998 whose mission is to design and deliver hands on maritime related educational, vocational and recreational opportunities to members of the community. The center has provided these experiences to over 10,000 students from the surrounding township school districts. The center works with school districts or individual teachers to provide a maritime learning experience that fits into whatever curriculum they are using. Programs include environmental studies, maritime history, boat building, sailing, and navigation. The center operates a 41' sail training vessel. Additional information on the center can be found at www.bayfrontcenter.org

Maritime Industries Academy (Grades 9-12) Baltimore Maryland

The school is a private school located inner city Baltimore with 300 students, it opened in 2003. The school is funded by the Baltimore Public School District under a special program and

is under central administration control. The school operates a Navy Jr ROTC unit and has had a navy career focus option for students. In 2007 it started to develop an industry partnering curriculum with local maritime companies such as Vane Brothers and Moran Towing, as well as the Maryland Port Authority and others. The school has been working with faculty at the Maritime Institute of Technology and Graduate Studies (MITAGS) the Master Mates and Pilots union training school to utilize the school facilities for their students. Additional information may be found by calling 443-324-0790

Mar Vista High School (Grades 9-12) Imperial Beach California

The high school in partnership with Navy's Military Sealift Command (MSC) started a program in 2002. The program is funded under California's Regional Occupation Program (ROP) which provides funds to schools for vocational training and funds from the Navy. Since opening over 250 students have completed training and many have gone into the maritime industry. The program is designed to have students secure entry level USCG documents as wiper for the enginroom or ordinary seaman for the deck department. The students in 11th and 12th grade follow a regular high school course of study they use their elective courses to take the US Coast Guard mandated training. The training is provided to the school by an outside contractor Training Resources Ltd that has the necessary course approvals. The training is done at the school or at the TRL facility. The partnership with MSC under its Cadet Shipping Program Coordinator is designed to provide prospective MSC employees the required sea service and is the same program utilized by the Maritime Academy's for their shipping program. The school sends groups of 10 students with a school instructor to a MSC ship in the summer of their senior year for several weeks. Students that complete the MSC program become eligible for hire by MSC upon graduation, and several are currently working for MSC. Additional information the school can be found at www.suhsd.k12.ca.us/mvh or contact MSFSC Cadet Shipping Coordinator at 757-417-4223.

Since the MARAD 2001 Conference several post secondary education programs have developed around the country. These programs are of the apprentice (classroom on the job training) or purely vocational (classroom only) type. The programs are run in conjunction with a community college, maritime employer, vocational school or at a union/employer school. The specifics of these programs while covered in my research have been or will be discussed by my colleagues today. As a point of information the following is a partial list of these programs and their web sites.

Community Colleges

Marshall Community and Technical College www.marshall.edu/ctc
Huntington West Virginia

Tidewater Community College www.tcc.edu
Norfolk VA

Seattle Community College www.seattlecentral.org/maritime
Seattle WA

Clatsop Community College www.clatsopcollege.com
Astoria Oregon

Kingsborough Community College www.kingsborough.edu
Brooklyn NY

Cape Fear Community College www.cfcc.edu/programs/ma_tech
Wilmington NC

Union/Employer Schools

Paul Hal Center for Maritime Education www.seafarers.org
Piney Point MD

Pacific Maritime Institute www.mates.org
Seattle WA

Employer

Global Maritime and Transportation School "TUG U Program"
www.gmats.usmma.edu
Kings Point NY

Maritime College www.sunymaritime.edu
Bronx NY

Massachusetts Maritime Academy www.maritime.edu/cmt
Buzzards Bay MA

Maine Maritime Academy <http://conted.mainemaritime.edu>
Castine Maine

Vocational

Northeast Maritime Institute www.northeastmaritime.com
Fairhaven MA

Fremont Maritime Services www.sea_safety.com
Seattle WA

Chapman School of Seamanship www.chapman.org
Stuart FLA

Training Resources Ltd www.maritimetraining.cc
San Diego CA

Outcomes of Maritime Education

My early research has shown a number of positive outcomes from the primary and secondary maritime education programs that are in operation around the country.

Student/Parent Interest: While Americans may take waterborne commerce and the maritime industry for granted, but when presented with information about maritime education and its benefits there is strong interest in the programs and all the schools have full enrollment and a long waiting list.

Graduation from School: While the data is not large at this point, since the programs are all fairly new, it appears that students who enroll in the maritime programs are tending to stick with them.

Comportment: The quasi military nature of the maritime industry with its requirements of command, responsibility, accountability, scheduling, uniforms, and required training is being transferred to the students. It has had a positive effect in the manner in which they behave and carry themselves across their entire school program.

Academic Grades: There are strict requirements set by the USCG on attendance and grades for the required maritime training, merely showing up in class will not earn a passing grade. Once the students realize this, they attend classes, study the material and earning passing or high grades. For many this is a new experience. The wonderful result of this is that when they attend their other academic classes during the day they are not switching their brains off and their grades in the other classes are also coming up

Employment upon Graduation: Since most of the schools are fairly new and only starting to graduate seniors recently and in small numbers, the data is limited, and more work needs to be done. It would appear from the data available and requests from employers for the school graduates and offers of summer internship programs that employment will be strong and wages and benefits are raising.

Maritime Education Assistance

At meetings I attend when I mention maritime education for primary and secondary students there is always a positive and overwhelming response with a slew of questions on how is it working, how can we get a maritime school in our city, how can my son or daughter get a maritime education?. Those of us who are products of the system know it's the best kept secret in America, which is a shame.

I believe that every city in America that has a connection to water be it ocean, lake or river, whether it's a commercial interest or recreational interest could support a maritime school or offer maritime programs in their public schools. There is certainly room for growth and no shortage of interested students.

I would hope that by my invitation to your committee hearing and my testimony today that I have excited the members of the committee about this unique opportunity to

assist America's urban students to a better education and future. I offer the following as some suggestions for what the committee might do to increase maritime awareness, and assist those maritime schools that are operating.

Support and promote conferences on maritime careers and education for primary and secondary schools, such as the conference being sponsored by the Ship Operations Cooperative Program (SOCP) and its industry partners on April 1-2 2008 at the Maritime Institute of Technology and Graduate Studies (MITAGS). Further information may be found at www.socp.us

Fund a grant to develop programs for other maritime regions around the country Atlantic, Gulf, Pacific Coasts and Inland Waterways like the program developed by the Great Lakes Maritime Research Institute in conjunction with University of Wisconsin (Superior) and University of Duluth for the Great Lakes Region. Further information on the program may be found at http://wupcenter.mtu.edu/education/great_lakes_maritime/index.htm

Encourage development and availability of video material that highlights the various maritime careers, such as tug-barge or shipbuilding industries. A single source point of contact for this material would be helpful to schools.

Review age restrictions for working on marine vessels that impact the development of apprentice programs.

Continue or increase funding for maritime vocational training programs at the federal level and encourage states to develop or continue such programs as California's "Regional Occupation Program" (ROP)

Support and encourage federal agencies such as the Maritime Administration, U.S. Coast Guard and others to continue to work with local existing maritime schools. And to work with local municipalities, port authorities and maritime enterprises to develop partnerships to assist in opening a maritime high school in their port.

Create and fund a National Cooperative Research Program to coordinate current and planned Marine Transportation System (MTS) related research by government agencies, educational institutions, and the private sector.

Foster research and development in the area of primary and secondary maritime education.

Encourage development of public awareness programs about our maritime transportation system and maritime education programs.

Closing

I see a very positive future for maritime education in the county's primary and secondary schools. Its form may be a fully developed career path program or just the inclusion of maritime history, navigation, logistics and transportation in the standard curriculum subject areas such as math, history and social studies. My early research has shown that these maritime programs are having very positive affects on the underserved school children in our cities.

I believe those students participating in these programs will come away with in addition to a bright employment and economic future an awareness of our maritime heritage, and the global world we live in.

Arthur H. Sulzer
Mariner

Appendix 1 Primary and Secondary Maritime Schools

East Coast

- 1) Maritime Academy Charter High School Philadelphia PA 215-535-4555
- 2) Maritime Industries Academy Baltimore MD 443-324-0790
- 3) East End Maritime Institute Green Port NY 631-477-2930
- 4) Marine Science and Technology High School Miami FL 305-365-6278
- 5) New York Harbor School Brooklyn NY 212-748-8727
- 6) Annapolis High School Annapolis MD 410-266-5240
- 7) Maritime Academy of Science and Technology Sandy Hook NJ 732-291-0995
- 8) Palm Beach Maritime Academy West Palm Beach FL 561-547-3775
- 9) South Broward High School Dania FL 754-323-1811

Great Lakes

- 1) Maritime Academy of Toledo Toledo OH 419-244-9999
- 2) Western New York Maritime Charter School Buffalo NY 716-842-6289
- 3) Bayfront Center for Maritime Studies Erie PA 814-456-4077

Gulf Coast

- 1) New Orleans Maritime High School New Orleans LA 504-827-6829

West Coast

- 1) Mar Vista High School Imperial Beach CA 619-628-5700
- 2) Grant Maritime Technologies High School Sacramento CA 916-286-4976
- 3) Port of Los Angeles High School San Pedro CA 310-832-9201

Testimony Of

Augustin Tellez
Executive Vice President
The Seafarers International Union,
Atlantic, Gulf, Lakes, and Inland Waters District/NMU

Before The

Committee on Transportation and Infrastructure
U.S. House of Representatives

Washington, DC

October 17, 2007

Good [Morning/Afternoon], Mr. Chairman. I am Augustin (“Augie”) Tellez, Executive Vice President of the Seafarers International Union, Atlantic, Gulf, Lakes, and Inland Waters/NMU, an affiliated union with the Seafarers Union International of North America, AFL-CIO. It is truly a pleasure and an honor to be here today on behalf of Mr. Michael Sacco, President of the Seafarers International Union of North America and of the Maritime Trades Department, AFL-CIO. I am also appearing today on behalf of the many thousands of members of the Seafarers International Union serving on board American-flag vessels in the U.S. and around the world.

I would like to thank the Committee for the opportunity to appear before you today and to express our thanks for the continued support of the Congress for the Maritime Security Program (MSP), the Jones Act and Cargo Preference that play a vital role in ensuring that the United States-flag fleet is generally not experiencing the kind of manpower shortages at issue here today, and can continue to supply the trained manpower essential to maintaining U.S. strategic

sealift capabilities. At the same time, I would be remiss in not pointing out that a recent government decision was made in order to save a relatively small amount of money by reducing crews in the vital U.S. Ready Reserve Force. This potentially sets a dangerous precedent and could create significant problems down the line by eroding the pool of well-trained, loyal, U.S.-citizen crews whom our military depend upon during times of conflict.

Seafarers International Union

The Seafarers International Union, Atlantic, Gulf, Lakes and Inland Waters District/NMU represents unlicensed U.S.-citizen merchant mariners sailing aboard American-flag vessels in the deep sea, Great Lakes and inland trades. The union also represents licensed U.S. mariners in the Great Lakes and inland sectors. SIU members sail in the three shipboard departments: deck, engine and steward. They work aboard a wide variety of vessels, including commercial containerships and tankers, military support ships, tugboats and barges, passenger ships, gaming vessels and many more.

Chartered in 1938, the SIU prides itself on representing the best-trained, most efficient crews in the world. A key to meeting that standard is the Paul Hall Center for Maritime Training and Education, located in Piney Point, Md. The center is a vocational training facility operated by an SIU-affiliated entity to train mariners from throughout North America. Today, the SIU is the largest North American union representing merchant mariners and constantly strives to stay ahead of the ever-changing needs of the industry.

Importance of MSP, Jones Act, RRF and Cargo Preference to Preventing Manpower Shortages in the Oceangoing Fleet

As I stated earlier, United States-flag vessels operating in the deep sea ocean trades are not experiencing the manpower shortages that are the subject of

today's hearing. The reasons for this include the MSP program enacted by Congress in 1996 and re-authorized in 2003; the preferences granted to United States-flag vessels for the carriage of military and commercial U.S. Government owned or impelled cargoes by Cargo Preference Laws enacted over the years; ongoing support for the Jones Act; maintenance of the RRF; and the general support of the Congress for emphasizing the use of commercial vessels for military cargoes expressed by the National Security Sealift Policy adopted by Presidential Directive in 1989. In combination, these programs and policies have enabled the United States to maintain a commercially viable and militarily useful fleet of privately owned vessels, manned by U.S. citizen crews, in active service in the international and domestic trades.

In 2004, pursuant to Congressional direction in the Maritime Security Act of 2003 to study the Maritime Security and Cargo Preference programs, the Government Accountability Office (GAO) concluded that—

The cargo preference and Maritime Security Programs both provide incentives to retain privately-owned U.S.-flag ships and their U.S. citizen crews for commercial and national defense purposes.¹

As stated by the Department of Defense in its comments on that Report—

The Department of Defense supports a strong and viable United States Merchant Marine which provides DOD with needed U.S.-flag vessels and mariners during war. The Cargo Preference and Maritime Security Programs are vital to the U.S. Merchant Marine and DOD.²

The direct linkage between these programs and U.S. Strategic Sealift capabilities is clear. Today 60 militarily useful vessels are enrolled in the

¹ *MARITIME SECURITY FLEET: Many Factors Determine Impact of Potential Limits on Food Aid Shipments*, U.S. Government Accountability Office Report GAO-04-1065, September 2004, at 3.

Maritime Security Program, while, according to the GAO, on average almost 200 United States-flag vessels participate in the carriage of military and commercial preference cargoes. The contributions made by these vessels to defense sealift are two-fold.

First, the vessels themselves are available for use by the military for defense cargoes. This is particularly true for the 60 vessels in the Maritime Security Fleet.

As important, however, is the contribution made to creating and sustaining a pool of skilled and experienced seafarers that the Departments of Defense and Transportation can draw upon to provide augmentation crews for Strategic Sealift vessels kept in reduced operating or reserve status when not required for contingency operations. In general, to provide for crew rotations, training ashore, vacations and sick leave, for every billet on board those vessels, there are approximately 1.5 trained and experienced U.S. citizen seafarers. It is those seafarers who form a substantial part of the manpower pool that can be called upon to crew vessels being activated from those reserve or reduced operating status fleets.

The importance of these ships and crews to military sealift is evidenced by their continued role in supporting Operations Enduring Freedom and Iraqi Freedom. To augment active privately owned, militarily useful vessels in commercial service and U.S. Government-owned active sealift forces, the United States maintains a fleet of approximately 45 sealift vessels in reserve or reduced operating status. During the period between October 2001 and February 2006, vessels activated from those reserve fleets transported 28.2 percent (U.S.-

² *Id.*, at 66 citing the September 7, 2004, letter from the Office of the Deputy Under Secretary of Defense for Logistics and Material Readiness.

flag commercial vessels carried most of the remaining 71.8 percent), or almost a third, of all military equipment and supplies delivered to U.S. forces in those contingency operations.³

One of the sealift lessons learned through Operations Desert Shield and Desert Storm in 1990-91 was that because of the age of many of these vessels, and the lack of any crew on board during reserve status, the vessels experienced a high operating failure rate during the initial surge to this earlier war. Crew shortages also became an issue because the only manpower pool that was available to man the government-owned vessels had to come from the U.S.-flag commercial fleet. After extensive study and analysis, in the mid-1990s the Department of Defense and the U.S. Maritime Administration changed the way that the government vessels would be maintained to solve the crewing issues encountered during the first Gulf War. In short, the Maritime Administration established a Reserve Operating Status Maintenance Program that placed a cadre of U.S. crews on board groups of reserve vessels in order to maintain the ships in a higher state of readiness. During Operation Iraqi Freedom, these ships were again called upon for initial surge transport, but unlike in Operation Desert Shield, the ships performed flawlessly, and most importantly, because of the small cadre of crew already on board the ships for maintenance there was a nucleus crew ready to sail the ships. By making the change in the mid-1990s, it increased the manpower pool by a small amount, but that was sufficient to help solve the crewing issues experienced during Desert Storm. Overall, it must be emphasized that in addition to the RRF crews, without the trained and experienced mariners drawn from the manpower pool made possible by the

³ Based on data provided by the U.S. Transportation Command's Military Sealift and Surface Deployment and Distribution Commands and the U.S. Maritime Administration.

United States-flag commercial fleet supported by the Maritime Security Program, Cargo Preference programs and the Jones Act, it would have been impossible to crew up those vessels for Operation Iraqi Freedom.

This being said, I am very concerned with plans by the government, as a cost-saving device, to decrease the readiness of certain vessels and reduce or eliminate the crews originally put on board through the changes made to the RRF program after Operation Desert Storm. While we are experiencing no significant crew shortages at this time, with the downgrading of the Reserve vessels, any future use of those vessels for major sealift will clearly lead to crew shortages in both the Jones Act and international trades. The gradual reduction in entry-level shipboard positions in all three departments makes this situation even worse.

Manpower Generally

While the SIU does not now have a manpower shortage, there are reasons for this that I would like to share with the Committee. As mentioned, in partnership with our contracted companies, the SIU operates and maintains a training school in Piney Point, Maryland. The school was opened in 1967 and has trained more than 100,000 merchant seamen who sail on board SIU contracted vessels in virtually every U.S.-flag trade. Overall, the school has issued 238,000 training certificates to individuals who have completed deck, engine, steward and safety courses. More than 22,000 men and women have graduated from the Paul Hall Center's entry-level training program, and I would like to point out that the program is still going strong. At the time of this hearing, there are more than 100 individuals enrolled in "phase one" of the trainee program, while dozens more are completing subsequent stages.

There is no shortage of mariners for us because the school allows for the flexibility to expand or contract the training pipeline through effective and active recruiting of new people to the industry. For example, if and when we sense that there may be a looming shortage of engine room rated positions, the problem is identified early and recruitment is focused and geared toward that particular position on the vessel.

On a regular basis, the SIU meets with its contracted companies to discuss training and manpower and to identify as early as possible any industry trends that need to be addressed, such as impending crew shortages. Several years ago, it was clear that the industry would be facing some shortages in the Jones Act (U.S. domestic, inland and coastal trades), particularly in the licensed positions. Working in partnership, the SIU and its Jones Act companies met and immediately implemented an Inland License upgrading program at our training school to address the expected crew shortages. Through this company-sponsored program we increased the number of mariners passing through the training pipeline and addressed any serious shortages. This program has been a tremendous success and it is working today to produce a steady pool of new and upgraded mariners for SIU contracted companies. This program, augmented by our Inland Apprentice program, will create a career-advancement process whereby entry-level boatmen will be recruited and trained to ultimately obtain their license.

Lastly, I would also like to offer a couple of comments on the requirement for a Merchant Mariner Document (MMD) and the soon-to-be-required Transportation Worker Identification Credential (TWIC). For SIU members, while TWIC will create a procedural obstacle, it should not lead to significant

mariner shortages provided it is implemented efficiently and properly. The reason that TWIC will not be as problematic to our members is that in order to sail today on an inspected U.S.-flag vessel, they must possess a current MMD. As part of the MMD application and approval process, the mariner is subjected to periodic and random drug and alcohol testing, and, importantly, is subject to a thorough background check by the U.S. Coast Guard and the Federal Bureau of Investigation. This is not the case in other modes of transportation.

Conclusion

In conclusion, the Seafarers International Union urges continued support for the Maritime Security Program, the Jones Act, Cargo Preference Programs and Ready Reserve Force crewing at levels which adequately help maintain the pool of American mariners whom we rely upon to bolster national and economic security. For that matter, the SIU urges support for all programs and policies that promote and maintain a viable, commercial U.S.-flag merchant marine. Absent such support and such programs, our nation would be left vulnerable as American-flag commercial ships that are militarily useful would essentially disappear, taking with them the trained, experienced U.S. crews who deliver the goods for our nation in times of peace and war.

Thank you for your attention and for the invitation to speak before you today.

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DEPARTMENT OF HOMELAND SECURITY

U. S. COAST GUARD

STATEMENT OF

REAR ADMIRAL JOEL WHITEHEAD

ON

MARINER EDUCATION AND WORKFORCE

BEFORE THE

SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

OCTOBER 17, 2007

Good morning Mr. Chairman and distinguished members of the Subcommittee. I am Rear Admiral Joel Whitehead, Commander, Eighth District, United States Coast Guard. The Eighth Coast Guard District is the largest of nine Coast Guard Districts and covers 26 states, more than 1,200 miles of coastline and 10,300 miles of inland waterways from Florida to Mexico and including the entire navigable lengths of the Mississippi, Ohio, Missouri, Illinois and Tennessee River systems. I am pleased to have this opportunity to appear before you today to discuss the Coast Guard's role in Maritime Education and Workforce.

Statement Overview

This document provides an overview of the merchant mariner training program in place to meet United States Government responsibilities under the International Maritime Organization's Standards of Training, Certification and Watch keeping for Seafarers Convention (STCW Convention), 1978, as amended, including:

- the history and evolution of the STCW Convention;
- the domestic training requirements in place prior to the implementation of the STCW Convention;
- the 1995 amendments to the STCW Convention;
- the changes to the domestic training requirements to implement the 1995 amendments to the Convention;
- the future changes to the training requirements 10 years after the implementation of the 1995 amendments to the Convention; and
- the IMO comprehensive review of the STCW Convention.

In addition, the document outlines mariner workforce-related issues and initiatives currently being implemented by the Coast Guard, including:

- our relationship with the Maritime Administration (MARAD);
- our involvement in maritime employment;
- our role in international forums;
- improvements to the credentialing and licensing program; and
- future improvements to benefit merchant mariners.

MERCHANT MARINER LICENSING AND DOCUMENTATION PROGRAM

The Coast Guard sets standards of training and qualification for seafarers and administers the Mariner Licensing and Documentation (MLD) program in compliance with domestic and international law. The aim of the program is to ensure U.S. vessels are manned by qualified, trained and competent personnel. The program's standards fulfill U.S. responsibilities under the IMO's STCW Convention, as amended.

STCW Convention Overview

In the late 1950s and early 1960s, the IMO developed a comprehensive series of conventions to establish a framework of international law addressing maritime safety and environmental protection. In developing this framework, the IMO, recognizing the most important element in the safe operation of any ship is the competence and experience of its crew, noted it lacked an international standard of competency for seafarers. In 1969, the IMO agreed to develop a draft STCW Convention.

The STCW was adopted by Conference at the IMO in 1978 as the first international attempt to standardize the qualifications required for masters, officers and watch personnel on seagoing merchant ships. The U.S. deferred ratification efforts in order to make necessary changes to our licensing regulations in order to meet the Convention requirements. Subsequent to making these changes, the U.S. became party to the STCW Convention in 1991.

The 1995 amendments to the STCW Convention

The 1978 STCW Convention had many limitations. These included vague requirements left to the discretion of parties; no clear standards of competence; no IMO oversight of compliance; limited port state control and inadequacies which did not address modern shipboard functions. In 1992, the IMO's Maritime Safety Committee (MSC) agreed to a U.S. proposal to conduct a comprehensive review of the 1978 Convention. This U.S. proposal suggested the review specifically consider the role of the human element in maritime casualties. IMO and its members agreed the time had come for the organization to concentrate on areas relating to people, training and operational practices, rather than issues dealing with improving ship construction and equipment standards.

The STCW Convention was subsequently significantly amended in 1995 to include a Code containing mandatory requirements and guidance information for the implementation of the Convention. These amendments entered into force on February 1, 1997. Parties to the Convention had five years in which to fully implement the new Convention, allowing for a transition or "gap-closing" period during which mariners who already held licenses and endorsements, or had begun the service and training to obtain them, were not required to meet the full training and assessment requirements. This transition period ended on February 1, 2002.

The comprehensive and detailed 1995 amendments established a level playing field among all parties to the Convention to help ensure consistent training worldwide. These amendments also established competence-based standards that placed emphasis on the requirements for training and assessment of skills in almost every facet of the mariner's profession.

The most notable changes to the convention included:

- Examinations and demonstration of skills
The requirements established minimum standards of competence for the range of certificates to be issued under STCW. These standards were presented in tables specifying the competence; the corresponding list of knowledge, understanding

and proficiencies associated with each competence; the methods for demonstrating each competence; and the criteria for evaluating each competence. The amendments also introduced an accepted method of determining competence through a combination of training and practical demonstration of professional ability.

- Quality Standard System (QSS)

The requirements required all training, assessment and certification activities be “continuously monitored through a quality standards system to ensure achievement of defined objectives, including those concerning the qualifications and experience of instructors and assessors.” Furthermore, the Convention required the quality standard system be subject to an independent evaluation every five years.

- Enhancement of Port State Control

The 1995 amendments strengthened the port state control provisions of the Convention by expanding the grounds on which a foreign ship could be detained and allowing port state control officers to look beyond merchant mariner certificates and conduct a direct assessment of the competence of merchant mariners.

Domestic Training Requirements

Although the U.S. became party to the STCW Convention in 1991, the Coast Guard did not publish an interim rule implementing the Convention until June 26, 1997.

The domestic regulations in place until that point required a mariner to obtain service, training, and assessment in order to obtain certification. To qualify for an entry-level license, mariners were required to obtain between 12 and 36 months of sea service. Training requirements included Radar Observer, Basic and Advanced Fire Fighting, First Aid and Cardiopulmonary Resuscitation (CPR). Additionally, mariners needed to pass a professional examination to assess their competency, commensurate with the level of the license sought. Those individuals going through Federal, State, and military maritime academies could obtain the entry-level license with 12 months of sea service and experience, since the formal academy training was accepted in lieu of sea service.

Licensed officers continued to advance their professional qualifications and credentials through on-the-job-training. As a mariner acquired one level of professional qualification, he or she would begin to work towards the next level of professional qualification. This advancement experience was achieved through actual sea service on a vessel, where the nature of the sea service was prescribed by regulation. After the mariner acquired the required experience, he or she would be examined by the Coast Guard. The only additional formal training required for a licensed officer to progress to a more senior license was Advanced Fire Fighting, Radar Observer, First Aid and CPR. If the mariner passed the professional examination and met all other requirements (training (i.e. Fire Fighting, First Aid), personal character, and medical) he or she was issued the upgraded credential.

A credential for unlicensed ratings could be obtained by acquiring sea service and completing a Coast Guard administered examination. Although training was not required, a mariner could use training to substitute for the examination and up to one-half of the sea service requirement.

Domestic implementation of the 1995 amendments to the STCW Convention

The 1995 amendments to the STCW Convention required a mariner to obtain service, training, and assessment in order to obtain certification. The primary differences between the 1995 amendments and the U.S. regulations in place at the time were the amount, type and methods of training, and the methods for assessment associated with each certificate. In particular, the 1995 amendments required specific courses including classroom and simulator training and the practical demonstration of skills. Additionally, STCW established a requirement of three years experience for all mariners who did not participate in an approved training program for an entry-level license. An example of the differences between STCW and domestic requirements for licenses for a Master's Ocean License is depicted in Table 1.

After a series of notices, public meetings and a lengthy comment period, the Coast Guard published an Interim Rule on June 26, 1997, to implement the 1995 amendments. The rule retained the existing licensing structure and incorporated STCW training and the practical demonstration of skills requirement; oversight requirements; and transitional provisions for existing credentialed mariners

This rule impacted mariners serving on commercial seagoing vessels over 200 gross registered tons whether operating on a domestic or an international voyage. This rule did not impact mariners serving on seagoing vessels less than 200 gross registered tons on domestic voyages, or mariners serving on non-seagoing vessels (e.g. inland towing vessels).

These regulations effected several sectors of the U.S. maritime industry in the following ways:

- Mariners are responsible for the costs of training, housing, and per diem. Additionally, shore-based training requires mariners to spend time ashore undergoing training, time during which they could be otherwise earning wages or on leave.
- Training providers are responsible for the course development costs, the cost of a quality standard system to oversee and administer the training, and the administrative costs associated with record-keeping.
- Shipping companies bear the cost of the loss of available trained personnel who are undergoing additional training, the increased cost to employ more highly-trained personnel, the costs associated with developing company training and the record-keeping requirements associated with the training of personnel.

Table 1
TABLE OF DIFFERENCES - MASTERS LICENSE

Requirement	Pre - STCW	Post - STCW
Service	12 months as Chief Mate	12 months as Chief Mate
Training	<ul style="list-style-type: none"> • Approved firefighting course* • Approved radar observer course • Qualification as Able Seaman • First Aid/CPR* 	<ul style="list-style-type: none"> • Management level training that provides the knowledge and understanding requirements of the demonstrations of skill • Approved firefighting course* • Approved radar observer course • Qualification as Able Seaman • First Aid/CPR* • Basic safety training • ARPA course • Global Maritime Distress and Safety System (GMDSS) radio operator course • Bridge teamwork course • Search and rescue course • Person-in-charge of medical care course
Assessments	<ul style="list-style-type: none"> • Professional examination • Flashing Light demonstration 	<ul style="list-style-type: none"> • Professional examination • Flashing Light demonstration • Practical demonstration of skills in the following areas: <ul style="list-style-type: none"> ○ Plan a voyage ○ Determine position ○ Determine and allow for compass errors ○ Coordinate search and rescue operations ○ Establish watch keeping arrangements and procedures ○ Forecast weather and oceanographic conditions ○ Respond to navigational emergencies ○ Maneuver and handle a ship in all conditions ○ Operate remote controls of propulsion plant and engineering systems and services ○ Plan and ensure safe loading, stowage, securing, care and unloading of cargoes ○ Assess reported defects and damages to cargo spaces and take appropriate action ○ Carriage of dangerous goods ○ Control trim, stability and stress ○ Monitor and control compliance with legislative requirements ○ Maintain safety and security of the ship's crew and passengers ○ Develop emergency and damage control plans and handle emergencies ○ Organize and manage the crew ○ Organize and manage the provision of medical care on board

* If not previously completed

Future changes in domestic regulations

The Coast Guard is currently reviewing the 1997 Interim Rule and is considering seeking additional comments. Issuing a revision at this time is necessary to:

- clarify regulations that have generated confusion;
- incorporate changes generated by the comments to the published Interim Rule;
- incorporate lessons learned during the ten year implementation period; and
- address recommendations from the independent evaluation (audit) of the mariner licensing and documentation program, the results of which were submitted to the IMO in 2003 as required by STCW.

The Coast Guard has engaged the Merchant Marine Personnel Advisory Committee (MERPAC) to provide recommendations on a number of issues under review.

Potential solutions to reduce the challenges from the implementation of the STCW Convention

The STCW Convention sets a minimum threshold upon which all countries must comply to ensure the competency of their seagoing mariners. It is designed to promote a uniform, international standard of shipping safety. The United States, as one of the world's largest port states, benefits from this uniformity when foreign vessels with foreign crews call in our waters.

Reciprocally, we are required to meet the same standards of competence for our mariners. As such, the Coast Guard is limited in authority to reduce the burden of implementation, particularly with respect to required training. Notwithstanding, the Coast Guard is examining other methods for implementation of the STCW requirements. As the Coast Guard restructures and centralizes the Mariner Licensing and Documentation (MLD) Program, we are examining areas where potential exists to develop process improvements leading to a reduction in the burden on the maritime industry. We are also examining other forms of training, such as computer-based training and distance-learning initiatives, which have the potential to provide the individual mariner savings in the cost of transportation and berthing for training and provide the mariner the opportunity to take the training on the job/ship.

We will continue to take advantage of our partnerships with other agencies, ship owners and seafarer organizations to help address the challenges associated with STCW. This cooperative examination of the current training processes will result in initiatives designed to provide the mariner with necessary competence while ensuring safe, secure, and environmentally sound maritime operations.

Future of IMO regulations - STCW Comprehensive review

In January 2007, the IMO began a comprehensive review of the STCW Convention. The IMO expects the review will take two to four years to complete and the resulting amendments to the Convention will enter into force in five to seven years. The review is limited in scope to avoid any unnecessary amendments or reduction of the very successful training regime. The review also aims to refine the Convention based on

lessons learned and include changes and new technology. The Coast Guard supports the comprehensive review, since it presents an opportunity to look for alternative training approaches not considered during the 1995 amendments which may help reduce the burdens imposed by the implementation of STCW.

To prepare the U.S. position for the comprehensive review, the Coast Guard is engaging various advisory Committees. The Merchant Marine Personnel Advisory Committee (MERPAC) provided recommendations on the issues open for review. Their input will be used to assist in the development of the U.S. position during the negotiations at IMO. The Coast Guard will also seek input from the Towing Safety Advisory Committee and the Shipping Coordination Committee, which is administered by the Department of State.

WORKFORCE INITIATIVES

Coast Guard and MARAD cooperative efforts supporting maritime employment

The Maritime Administration (MARAD) has the lead on issues relating to maritime workforce development; however the Coast Guard provides a significant supporting role. For example, the Coast Guard co-sponsored two industry meetings on mariner recruitment and retention in 2001 and 2002. These meetings focused on the status of the U.S. labor force and recommendations on initiatives which may be pursued to alleviate some of the problems associated with the shortage of U.S. qualified mariners. Following the 2002 meeting, the Coast Guard and other participants requested that the MARAD-sponsored Ship Operation Cooperative Program (SOCP) continue the work. Today, the Coast Guard serves as a participating member in the MARAD-facilitated SOCP. SOCP is an industry-government forum which serves as a venue to discuss maritime related issues.

The Coast Guard also supports other agencies in the development of programs to facilitate employment in the maritime industry. For example, the Coast Guard worked with the U.S. Army and Navy to develop programs to assist service personnel to transition from the armed forces into maritime employment. Through MERPAC, the Coast Guard assisted these agencies in obtaining credit and recognition of military service and training towards obtaining merchant mariner credentials.

The Coast Guard also currently recruits maritime graduates from the U.S. Merchant Marine Academy and the six state maritime academies as entry level Coast Guard officers. The Coast Guard currently has liaison officers assigned to the U.S. Merchant Marine Academy and California Maritime Academy. Our recent report to Congress, *"Enhancing the Coast Guard's Marine Safety Program,"* recommends an increase of the number of maritime graduates serving in the Coast Guard in support of the maritime safety mission. To improve maritime graduate accession, the Coast Guard is considering increasing the number of liaison officers to the maritime Academies.

The Coast Guard and the MARAD do share statutory responsibilities in assuring U.S. merchant marine vessels are manned by qualified, trained and efficient personnel. The Coast Guard works with MARAD in the area of maritime training and crew

qualifications to meet our international and domestic regulatory responsibilities. On a number of occasions the two agencies have combined both financial and personnel resources in the area of maritime training and qualifications.

The Coast Guard and MARAD work closely on the implementation of the STCW Convention. The two agencies co-Chair the “Joint Maritime Administration and Coast Guard Maritime Academy STCW Review Committee,” responsible for overseeing and evaluating the implementation of STCW at the U.S. Merchant Marine Academy and the six state maritime academies. The Joint Academy STCW Review Committee completed the mid-term audits of the U.S. Merchant Marine Academy and the six state maritime academies in 2006, as required by the STCW Convention, to ensure that those providing the training are monitored under a quality standard system.

The Coast Guard and MARAD have worked together on the following initiatives:

- Supporting training providers in obtaining assistance for their programs, including acquiring training equipment such as lifeboats and fire-fighting equipment.
- Developing maritime training standards and model training programs to meet domestic and international requirements such as the Global Maritime Distress and Safety System (GMDSS), the liquefied natural gas standards; and maritime security training standards and model courses.
- Preparing for international meetings such as the International Labor Organization (ILO) Maritime Labor Convention, 2006, and the development of a U.S. position on the Comprehensive review of the STCW Convention.
- Facilitating the use of grant monies for training of mariners by obtaining Department of Labor classification as “apprenticeable” of certain rating positions including Able Seamen and Qualified Member of the Engineering Department.
- Facilitating the gathering of merchant mariner licensing and documentation data in support of the MARAD “Mariner Outreach System” (MOS) initiative.

Coast Guard role in high school and college maritime education programs

The Coast Guard evaluates maritime education programs for compliance with domestic and international requirements, and for their efficacy in producing qualified, competent mariners. The Coast Guard routinely assists educational organizations, including colleges and high schools, in developing and obtaining approval for maritime training programs.

These efforts include meeting with and advising schools of Coast Guard requirements and providing model courses and other tools to assist in program development. Thirty college and high school maritime training courses and programs have been approved to date.

As described above, the Coast Guard also approved the training programs provided by the U.S. Merchant Marine Academy and the six state maritime academies as meeting the requirements of the STCW Convention.

Coast Guard role in international forums

The Coast Guard plays a vital role in international forums relating to people, training and operational practices. We continue to stress in a number of forums that ship construction and equipment standards are only as good as the human element related standards and practices that accompany them.

Due to the increasing globalization and changes in the maritime industry labor force, international forums play a more vital role than in past years, requiring consistent and continued representation from the U.S. The most important international forums which impact maritime personnel are the ILO and the IMO. The Coast Guard continues to support both organizations with strong technical and political expertise. To ensure the consistency and continuity of U.S. positions, goals and objectives, representation on both organizations is provided by the Coast Guard Office of Operating and Environmental Standards, Maritime Personnel Qualifications Division, which is composed primarily of civilian personnel.

The Coast Guard serves as the Head of Delegation to the Sub-Committee on Standards of Training and Watch keeping (STW), the IMO body chartered to deal with issues related to maritime training and qualifications, including the STCW Convention. This body meets annually to discuss training matters under consideration at the IMO.

The Coast Guard also serves as a member of the U.S. delegation to the ILO during discussions of maritime labor issues. The most recent ILO negotiations led to the development of the Maritime Labor Convention (MLC) 2006, where the Coast Guard provided the technical expertise for the U.S. delegation. The ILO MLC 2006 consolidated 68 maritime labor instruments, recommendations, and conventions, into a comprehensive set of global standards. The adoption of the ILO MLC 2006 triggered the harmonization of IMO and ILO maritime personnel-related Conventions. The IMO comprehensive review of the STCW Convention will include the harmonization with the ILO MLC, 2006 on a number of issues, such as training, medical certificates, and hours of work and rest.

Improvements to the credentialing and licensing program

For the past 12 months, the Coast Guard has been proceeding with its project to restructure and centralize the Marine Licensing and Documentation program. Since June, the NMC has been focused on improving its internal customer service processes to issue mariner licenses and documents faster and with a higher degree of accuracy and consistency. Through the introduction of key performance and processing metrics, the NMC identified bottlenecks in the application processing system and focused efforts and resources on those areas identified as constraining the system.

The Coast Guard is managing a project to centralize and restructure the Mariner Licensing and Documentation (MLD) program. By centralizing the evaluation process, the mariner will benefit in the following ways:

- Decreasing Processing Time

The Coast Guard currently has 17 Regional Examination Centers (RECs) which maintain different processes for issuing credentials. Centralization of this process will allow the Coast Guard to substantially decrease the time it takes to process an application. Having all evaluation resources located and managed centrally will allow quick reallocation of those resources in response to changing demands. In this way, the Coast Guard can greatly reduce in-process work to be ready for new work. Recent information technology changes now enable National Maritime Center leadership to measure program-wide processing times by credential type to identify process inefficiencies in need of improvement. Several concurrent improvement projects are in-progress to address both short-term and long-term objectives.

- Consistency of Service

Through centralizing evaluators, the Coast Guard can assure consistency while blending and maintaining our evaluator expertise through cross-training and formal and informal knowledge sharing. To date, the entire program has seen a 19% improvement in consistency of processing time between the fourth quarter of 2006 and the first quarter of 2007, with overall times trending down.

- Improved Customer Service

Centralizing creates economies of scale and process consistencies which make it possible for mariners to check the status of their credential application online via a Coast Guard website; <http://homeport.uscg.mil/>. (From the home page, select Missions > Merchant Mariners > Merchant Mariner Application Status). A new toll free call center is also available (1-888-IASKNMC / 1-888-427-5662) to answer questions and provide information.

In August, as a result of process improvements, the NMC reduced the inventory of credential applications being processed by 39% and issued over 2,000 mariner credentials, reaching a new production record. While the overall processing time remains higher than desired, the average license renewal processing time has decreased by 25% since June. Many of the processing delays involve time spent waiting to obtain information missing from the mariner's application. To address this, we have implemented changes to the evaluation process and the application forms to make it easier for mariners to submit a "ready for evaluation" application, thus reducing processing time. Regional Exam Center staff will also remain available to assist the mariners to ensure that their application packages are ready.

The Coast Guard also recently published an Notice of Proposed Rulemaking (NPRM), followed by an Supplemental Notice of Proposed Rulemaking (SNPRM), proposing to consolidate the current license, MMD, certificate of registry and STCW certificate into a single combined "Merchant Mariner Credential" (MMC). The MMC will enable mariners to carry a single document, instead of numerous separate documents, containing all of their qualifications. The passport style MMC has been strongly endorsed by MERPAC as something which will make life easier for mariners

Future improvements that will benefit merchant mariners

The recent Coast Guard report to Congress, “*Enhancing the Coast Guard’s Marine Safety Program*,” includes recommendations which will have a positive impact on mariner training and recruitment. The following recommendations will benefit the merchant mariners:

- Expedite regulatory implementation. Act on MERPAC or industry recommendations related to Maritime training within the regulatory process in a more expedient manner.
- Improve mariner credentialing through greater efficiency, transparency and capacity, by continuing to improve processes and by utilizing technological advances. The Coast Guard is planning to significantly increase support at the NMC and Sector Regional Examination Centers to improve service delivery. These improvements would allow the Coast Guard to process applications and approve courses in compliance with the domestic and international requirements in a more expedient manner.
- Increase the accession of maritime graduates from the U.S. Merchant Marine Academy and the state maritime academies in support of the Maritime Safety mission.
- Expand Outreach and Advisory Mechanisms for Industry and Communities. The Coast Guard would further open the lines of communication with training providers, mariners and other industry groups to further maritime training and education, while ensuring that mariners are duly qualified.

The Coast Guard’s proposed Authorization Act for Fiscal Year 2008 also includes various provisions which, if enacted into law, will benefit mariners. The Coast Guard proposal includes creating a new federal advisory committee called the “Merchant Marine Medical Advisory Committee” (MMMAC), comprised of maritime medical professionals and working mariners, to advise the Coast Guard on matters related to the medical and physical qualifications of merchant mariners.

The proposal includes a provision authorizing the Coast Guard to extend the duration of merchant mariner credentials in times of emergency, such as hurricanes. The proposal also includes a provision to modernize mariner recordkeeping requirements and authorize the Coast Guard to promulgate regulations requiring employers to maintain sea service records for at least 5 years after completion of the mariner’s service.

Finally, the proposal seeks the deletion of the exemption in 46 USC 8905(b) which allows certain towing vessels engaged in the offshore mineral and oil trade to be operated by an unlicensed operator. Deletion of this exemption will require these vessels to be operated by a properly licensed individual improving safety and security in offshore waters.

CONCLUSION

The Coast Guard believes that STCW has significantly enhanced the safety and security of the United States by requiring foreign vessels calling in our waters to be manned with competent crews, and by providing port state control authority to take appropriate action against vessels which do not meet these internationally recognized standards.

Along with this benefit, the Coast Guard also recognizes implementation of the requirements of the STCW Convention for U.S. merchant marine vessels imposed a financial burden on our mariners, and we are taking positive steps to reduce that burden.

The Coast Guard is examining methods which may potentially reduce some of the challenges associated with implementation of the STCW requirements. We will continue to utilize our strong partnerships with other agencies, such as MARAD, and industry, to address the challenges associated with STCW. Our goal of this cooperative examination of the current processes of training and development is to reduce the burden on the mariner while ensuring safe, security, and environmentally sound maritime operations.

Thank you for this opportunity to discuss maritime education and workforce. I will be pleased to answer any questions you may have.

Written Testimony of

Eric K. Larsson
Director of Maritime Training and Education
Seamen's Church Institute
241 Water Street
New York, NY 10038

For the
Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure
United States House of Representatives
Washington, DC

October 17, 2007

My name is Eric Larsson, Director of Maritime Training and Education for the Seamen's Church Institute (SCI). I have been involved in maritime education for 30 years. I have a B. S. degree from the U.S. Merchant Marine Academy (1976), a M.S. degree in Adult Education and Human Resource Development from Fordham University (1991) and am currently in the final stages leading to a PhD in Education Psychology at Fordham University.

At Seamen's Church Institute we operate two simulation training centers, one in Paducah Kentucky (started in 1997) and the other in Houston, Texas (started in 2001). Since 1997 when operations began in with the opening of the Paducah facility, more than 15,000 mariners have passed through our doors. More than 40 different inland towing companies as well as coastal, deep sea, and individual mariners have made use of these facilities. Most of the training conducted for the inland towing companies is not required by U. S. Coast Guard regulations. In 2000, Seamen's Church Institute hosted a blue water-brown water forum on recruitment and retention. This was followed by two conferences, one at the U.S. Merchant Marine Academy and the other at Maritime Institute of Technology & Graduate Studies.

In the aftermath of 9/11 the momentum from these conferences was lost, but the problem remained for all maritime industries. My comments here, however, will concentrate on the inland towing Captains and Pilots. These individuals are the hardest to replace because of the time and experience necessary to be promoted. The inland towing industry is facing the retirement of their baby-boomer generation and like most industries is faced with the difficulties of replacing this extraordinary group of individuals.

Introduction

This written testimony examines the profile of mariners that work as captains and pilots on inland towing vessels **including specific mariner profile and age statistics not available from any other source**; retirement issues; time requirements to obtain a license; apprenticeship-only versus apprenticeship/simulation training models, remission of sea time; availability and cost of training for "hawse pipe" mariners (who have worked their way up the promotion ladder from deck to wheelhouse); recruiting mariners; and retention of mariners.

In the United States, more than 5,150 towboats operate on inland waters and western rivers (From *Statement of Rear Admiral John E. Crowley, Jr. on the Maritime Transportation Amendments of 2004*). Beginning in 1997, the towing industry began training using simulation as a means of improving their ability to manage risk. Many of the companies that utilize the simulator centers have seen a marked improvement in their safety statistics in collisions, allisions and groundings.

Profile of the Inland Captains and Pilots

Training conducted at our Paducah facility from June of 1997 to July of 2004, yields the following information about our mariner population. A total of 38 companies participated in training courses for their Captains and Pilots. Retention of these individuals is very high. During the seven year period examined a total of 5,040 captains and pilots attended training. Some of the participants attended courses in multiple years. When factoring out returning participants, there were 2057 individual records. The mean age of this sample of captains and pilots was 49, the median age was 49, and the mode was 47. The number of mariners that are 55 or older equals

581; meaning that 28.24% of this population either are or will be of retirement age by 2014. When looking closer, 145 of these mariners are already 65 or older. When examining the data by company, it was found that 42% of one company would reach retirement age in 10 years.

Time Requirements to Obtain a License

Examining the U.S. Coast Guard requirements it takes, at a minimum, 600 12-hour days to be qualified as a pilot. During this 600 day period on a towboat, a successful individual would need to pass a written examination at the end of the first 360 days to be qualified as a steersman, followed by an additional 240 12-hour days during which time a Towing Officer Assessment Record (TOAR) must be completed. If the individual is working a two for one schedule (two days on for one day off) this process takes close to 3 years. In addition, this U.S. citizen must pass a National Driver Register check, a fingerprint check, identification verification, a drug screen, pass a U.S. Coast Guard radar observer test, and be licensed by the FCC to use VHF radio. Assuming the individual meets all of the U.S. Coast Guard requirements, he or she must meet the requirements of the company before being “turned loose” on their own vessel. It then takes another 360 12-hour days to obtain a master’s license. This is by no means an easy process, nor should it be. A captain or pilot is responsible for the safety of all on board, the safety of the environment, and the safety of the vessel.

Apprenticeship Only Versus Apprenticeship/Simulation Training Models

Companies are making great efforts to meet this problem head on. Unlike the blue water mariners who come from six state schools and one federal academy, there is no school dedicated to inland mariners: therefore most of the mariners work their way up the promotion ladder from Deck to Wheelhouse. It should be noted here that there have been efforts by a number of companies to recruit individuals from the state and federal school with mixed results. The individuals from these schools have the necessary license, but not the skill or experience on towboats necessary to do that particular job. Some graduates successfully transition into this industry, others don’t. Most new pilots come up through the ranks following the apprenticeship model used in Mark Twain’s days as a cub pilot detailed in his book *Life on the Mississippi*. Nothing fully replaces the necessity of time on-board being trained to do the job.

Increasingly, companies are making use of simulation to assist in the selection and training process for prospective steersmen and pilots. As many as 15 prospective pilots have been in a class that is then narrowed down to meet the available on-board training slots within the company through a designed simulator training curriculum. The Seamen’s Church Institute has submitted a training program to the U.S. Coast Guard that would facilitate directed learning for potential steersmen. Instead of being told what to do and how to do it as occurs in the apprenticeship model, participants using the simulator “learn by doing” it on their own after classroom sessions and briefings explain how to do it. Mistakes become useful teaching tools. In the real world, mistakes cannot be tolerated, so the training captain has to take over to mitigate any risk.

Remission of sea time

The U.S Coast Guard recognized the usefulness of simulation training in the past, offering a 6:1 ratio of remission of sea-time (see Appendix A) for time spent in a simulation training program. A two week (10-day) program of specifically directed classroom instruction, simulation

exercises, briefings and debriefings would allow the mariner 60 days of credit towards their next license. This is allowed for under 46 CFR10.304 (d) states that "Simulator training in combination with a Coast Guard approved training course may be submitted to the Commanding Officer, National Maritime Center, for evaluation and determination of equivalency to required sea service. Simulator training cannot be substituted for recency requirements, but may substitute for a maximum of 25 percent of the required service for any license transaction." The USCG has since reduced the ratios such that only time actually spent on the simulator is allowed a 6:1 ratio and classroom time allows for a 2:1 ratio. These simulation courses focus on tasks that a steersman needs to know in order to properly conduct themselves on the job. This time, whether in the classroom or on the simulator is surely more valuable than time spent on board where duties may include basic maintenance of the vessel, on call watch standing, painting or chipping. If an individual or a company goes out of their way to obtain training that will accelerate the learning process, why not reward them for their efforts by reducing the initial 600 days by 60 days if they attend a ten day course. Even with this reduction of time, a company will not turn over one of their vessels to an individual unless they are sure of their capabilities. The risk involved is too high to take chances.

Availability and Cost of Training for "Hawsepipers"

There are numerous simulation training facilities for deep sea and coastal mariners. A week of training at a private facility can cost as much as \$22,000 for a limited numbers of trainees. This has a lot to do with the cost and sophistication of the simulation equipment and the high level of experience required of the instructional staff. In the inland towing industry, there are very few sites capable of training the mariners of the future. This list would include the Seamen's Church Institute, Paducah facility; the Seamen's Church Institute, Houston facility; Delgado Community College in Louisiana; Northeast Maritime in Rhode Island; and Texas A & M. Other training institutions may be capable of such training, but these are the only ones I know of that have in any way been connected to the inland industry. There are other schools that do limited training such as radar, such as the River School, Sea School and Davis Marine. In addition to this training some companies provide additional training of their own. As an example, Kirby Corporation has a simulator with visual capability they use for radar and mate training. They also provide numerous other training courses to meet their own internal needs, including firefighting, tankerman, license preparation, and CPR/First Aid.

The Seamen's Church Institute provides over 80 weeks of simulator training each year to as many as 40 different companies and almost 2000 captains and pilots at an average of less than \$1000/person. Some of these courses are conducted with the assistance of inland companies for future steersmen for the simple reason that the company sees the value of such training in accelerating the safe transition from on deck to the pilothouse.

Recruiting and Retention of Mariners

The towing industry is remarkable, in that it moves 17% of the cargo in this country for 2% of the cost, and it is virtually invisible to the average citizen. It certainly is more efficient than trucks or trains. The rivers can also stand additional volume. To accomplish that more individuals need to be attracted to and retained by the industry. Seamen's Church Institute's simulator has been used as a recruiting tool by industry leaders in showcases the high tech nature of the industry today. With electronic charting, internet, cellular communication and AIS

technology being placed on board, there are many aspects of the job that would appeal to the next generation of potential pilots. Through adopt a towboat initiatives and specialized curriculums that use towing operations to teach math, history, science, and economics, new interest has been generated with grade school and secondary level students. It will always take a certain kind of person that can deal with the lifestyle of a towboat mariner. Schedules that keep individuals away from home for a month at a time will always present problems. Wages have increased recently in an effort to retain valuable people resources. This may entice captains and pilots to remain past age 65, but that will only delay the need to replace our aging mariner population.

Conclusions

This industry and the individuals that work in it are vital to the commerce of this country. Efforts should be taken to recognize the efforts of companies that train their workforce not only to the level required, but above and beyond that level. Remission of sea time for simulator training should be encouraged and facilitated by the U.S. Coast Guard. Courses that use a combination of simulator training and structured on-board training should be rewarded further still. This would ensure that individuals that were on accelerated tracks would not sacrifice crucial safety margins. The captain and pilot on inland towing vessels need to know more than ever before. Perhaps recognizing other college experience would assist in interesting people in the industry. Seamen's Church Institute would be happy to demonstrate the capabilities of the simulators in Houston or Paducah to any and all visitors. While simulation technology and its use in mariner education is not the only possible answer, it is certainly a viable option. Thank you for the opportunity to provide this testimony.

Appendix A



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U.S. Coast Guard

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NOV 18 1991

16720/4

Mr. Eric K. Larsson
Director
SCI Maritime Training
241 Water Street
New York, NY 10038

Dear Mr. Larsson:

This is in response to your letter of October 1, 1991, requesting renewal of approval for your ten day Basic Shiphandling and Bridge Team Training Course.

The course curriculum, instructors' credentials and facility have been evaluated by the Officer in Charge, Marine Inspection (OCMI) New York, New York, the Maritime Administration and Commandant (G-MVP) U.S. Coast Guard. The course continues to satisfy the requirements of Title 46, Code of Federal Regulations, Part 10, Subpart C.

In view of the foregoing, the following approval is granted by Commandant (G-MVP) U.S. Coast Guard:

Anyone who successfully completes your ten day Basic Shiphandling and Bridge Team Training Course is considered to have gained 60 days watch officer credit toward any U. S. merchant mariner's deck license. This course does not satisfy the recency requirements of 46 CFR 10.202(e) or the six months of able seaman service required by 46 CFR 10.407(a)(1).